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COUNTY BOROUGH OF SOUTHPORT.

REPORT

UPON THE

Health and Sanitary Condition

OF THE

County Borough of Southport,

FOR THE YEAR 1927.

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C. Tinling & Co., Ltd., Liverpool, London & Prescot.

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Rateable Value 1st April, 1927 ... ... £759,134
Penny Rate yields £2,953

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THE HEALTH COMMITTEE.

The Worshipful The Mayor

(Councillor J. G. Wilkinson, J.P.).

Chairman ; Alderman C. Aveling, J.P.

Vice-Chairman ; Councillor A. O. Smith.

Ald. F. Harling, J.P.

Ald. Dr. A. W. Limont, J.P.

Ald. W. H. M. Mawdsley, J.P.

Ald. W. H. Potts, J.P.

Ald. A. Tomlinson, J.P.

Counc. Dr. G. R. Anderson, M.B.E., J.P.

Counc. J. R. Billington.

Counc. T. Ball.

Counc. Dr. H. Coates.

Counc. Jas. Cottam.

Counc. W. H. Dent.

Counc. Miss Hartley, J.P.

Counc. G. H. Hibbott, J.P.

Counc. Dr. E. W. Lewis.

Counc. Miss M. Needham.

Counc. Miss Rimmer, J.P.

Counc. T. Scholes.

Counc. A. Yates.

TO THE CHAIRMAN AND MEMBERS OF THE HEALTH COMMITTEE OF THE COUNTY BOROUGH OF SOUTHPORT.

Mr. Chairman, Ladies and Gentlemen,

I have the honour to submit the annual report on the Sanitary conditions of the Borough for the year 1927.

We may look upon the year 1927 with some pride ; it is a year which is outstanding in the history of the Health Department.

The work of the various departments has progressed to my great satisfaction.

The Sanitation of the Borough is on the whole particularly sound, although during the periods of excessive rainfall some flooding of basements occurred showing that the existing outfall was unable to cope with the exceptional heavy storm water.

Southport has been favoured with climatic conditions during the winter season which compare favourably with those obtaining in other resorts ; whereas the South has suffered a rigorous winter, Southport has largely maintained its reputation as regards its equable winter weather.

The proportion of deaths at ages of 65 and upwards is 54%. The purity of the air here is truly remarkable ; the comparative figures bearing on this, which are set out in the Meteorological Tables, should be carefully studied.

After many decades during which the inadequacy of the old Isolation Hospital has been admitted by all, the schemes and labours of many Chairmen have at last brought fruition, and the new Isolation Hospital stands as a model of the most recent design. The Hospital was opened in October by Sir George Newman who went so far as to say that he knew no existing hospital either on the Continent or in America which was better adapted and designed for the work contemplated.

Unfortunately it was impossible to build the X-ray block and laboratory before the end of the year, but the construction of this important department will be commenced shortly and should be completed by the Autumn.

The New Hospital is, apart from other obvious comparisons, much more " elastic " than the old one, and it is possible to extend the work on the Infective Diseases side. I have been able to arrange the admission of severe cases of Measles and Whooping Cough when either the severity of the disease or the home conditions warrant, and the doctors have been circularised to this effect.

The Sanatorium is being used to the full, and the site is proving very well suited to the treatment of Tuberculosis. The latest apparatus to deal with the difficult matter of the sterilization of eating utensils and the disposal of sputum has been installed. Some illustrations of the various parts of the hospital are included in this report.

A commencement was made towards the end of the year in the treatment of suitable cases by Artificial Sunlight and though it is impossible, owing to the short time under review, to dogmatise as to results, such as they are, it is safe to say that the department is serving a useful purpose and will probably save the Corporation expense in cases which would otherwise require institutional treatment.

Reports of the various departments should be read with care for they show that the work is being carried out with interest, and I may say that the stultifying effect of monotonous routine in the conduct of clinics and departments is carefully eschewed by all those in charge, and no measures are deemed too arduous to obtain the results desired. Especially is this so in dealing with all those who come to the department clinics. The reproach of " officialdom " cannot be levelled at the methods of your Health Department, for each member of the staff is willing to go to almost any length in assisting those who seek advice or help.

The conditions relating to infectious disease at the beginning of the year threw exceptional strain on the department. The ratepayers of the town should now be made to realise just what it means to have a department which has its machinery ready for all emergency, and machinery which is so effective that it is ready to work at a moment's notice. The rapid control and elimination of infective disease is of paramount importance to a health resort, and long before the Southport season commenced, Southport was able to boast a clean bill. The money saving to the town must have been enormous though we cannot estimate it. The work of this department goes on quietly and without fuss, and its value cannot be gauged in pounds, shillings, and pence.

The organisation and equipping of the new Hospital have meant much labour and thought, and those who simply view the place cannot appreciate the amount of detailed work which has been carried out. My personal thanks are due to the other Departments for their kindly co-operation and assistance.

Though it is not my custom in annual reports of this nature to thank my colleagues for their work, I feel that failing more material recognition I should put on record my appreciation of the loyalty of every member of my staff.

Yours faithfully,

GEO. C. BARNES.

Medical Officer of Health.

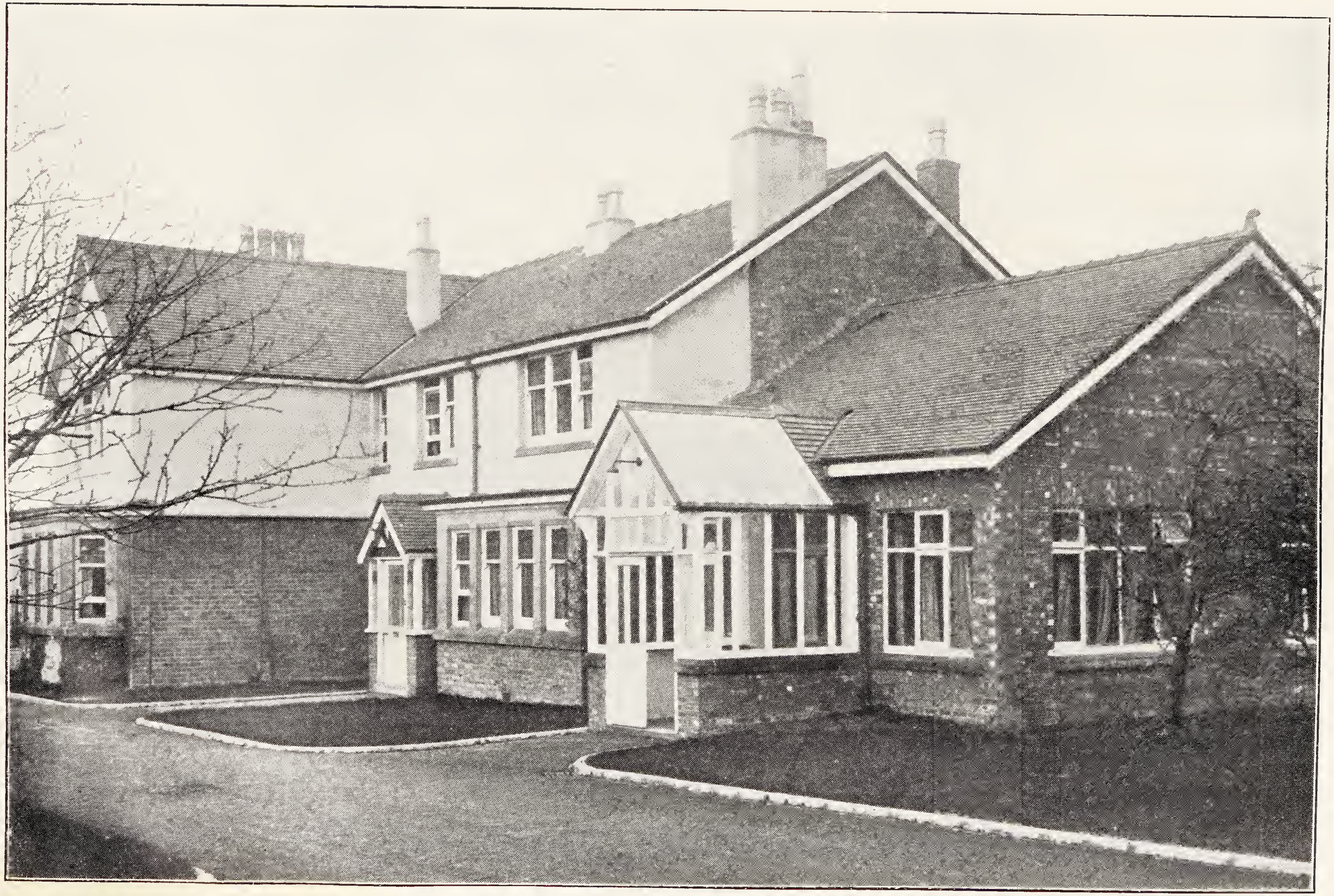
PUBLIC HEALTH OFFICERS.

Medical Officer & School Medical Officer	G. C. Barnes, D.P.H.	
Deputy ,, ,,	W. E. FitzGerald, D.P.H.	
Assistant Medical Officer of Health	Dorothy E. Mathews, D.P.H.	
V.D. Medical Officer & Dermatologist	Dr. H. Bardsley, M.R.C.S., L.R.C.P.	
Maternity Ward Obstetrician-in-Charge	Dr. A. S. Garden, M.D. Aberdeen ; L.M. Dublin.	
Consultant Tuberculosis Officer	Dr. John Hay, M.D., F.R.C.P.	
Nose and Throat Specialist	Dr. C. Yorke, M.D., F.R.C.S.Eng.	
Veterinary Surgeon	H. G. Hewetson, M.R.C.V.S.	
Analyst	H. Davies, M.A., B.Sc., F.I.C.	
Dentist	J. H. Highton, L.D.S.	Jointly with Education Committee
Do.	W. Martland, L.D.S.	
Dental Mechanic	R. Sanderson.	
Chief Sanitary Inspector	J. Peet (C).	
District Sanitary Inspector	W. Halsall.	
Do.	K. Aspinwall (C.).	
Do.	S. J. Wilde (C.).	
Do.	G. Huggins (C.).	
Food Inspector	P. Wright (C.).	
Shops Inspector	G. Hadley (C.).	
Ambulance Attendant and Infectious Disease Enquiry Officer	H. Magee.	
Ambulance Driver	A. W. Armitage.	
Clerk	H. Griffiths.	
Do.	E. Wilkinson.	
Chief Health Visitor	Miss V. M. Willder (A.B.C.)	Jointly with Education Committee
Assistant Health Visitor	,, A. Bullen (B.C.)	
Do.	,, E. Palmer (A.B.C.)	
Do.	,, M. Lewis (A.B.C.)	
Do.	,, A. Probert (A.B.C.)	
Do.	,, E. Dearden	
Do.	,, G. M. Shenton (A.B.)	
Do.	,, E. Whelan (A.B.C.)	
Dentist's Assistant	H. Rimmer.	
Clerk	I. Lund.	
Do.	D. Illingworth.	
Do.	G. Singleton.	
Caretaker, 2, Church Street	T. Wright.	
Do. Slaughterhouses	F. Beaton.	
Victoria Baths Canning Road Baths Compton Road Baths Superintendent	S. Hodson.	

A.—Trained Nurse. B.—Central Midwives Board. C.—Royal Sanitary Inst.

NEW HALL HOSPITAL.

Matron	Miss S. Coulter.
Home Sister	Miss Elsie Fletcher.
Night Sister	Miss Mary McCrory.
Sanatorium Sister	Miss Annie Daley.
Engineer	T. Wolfenden.
Porter	J. Seddon.



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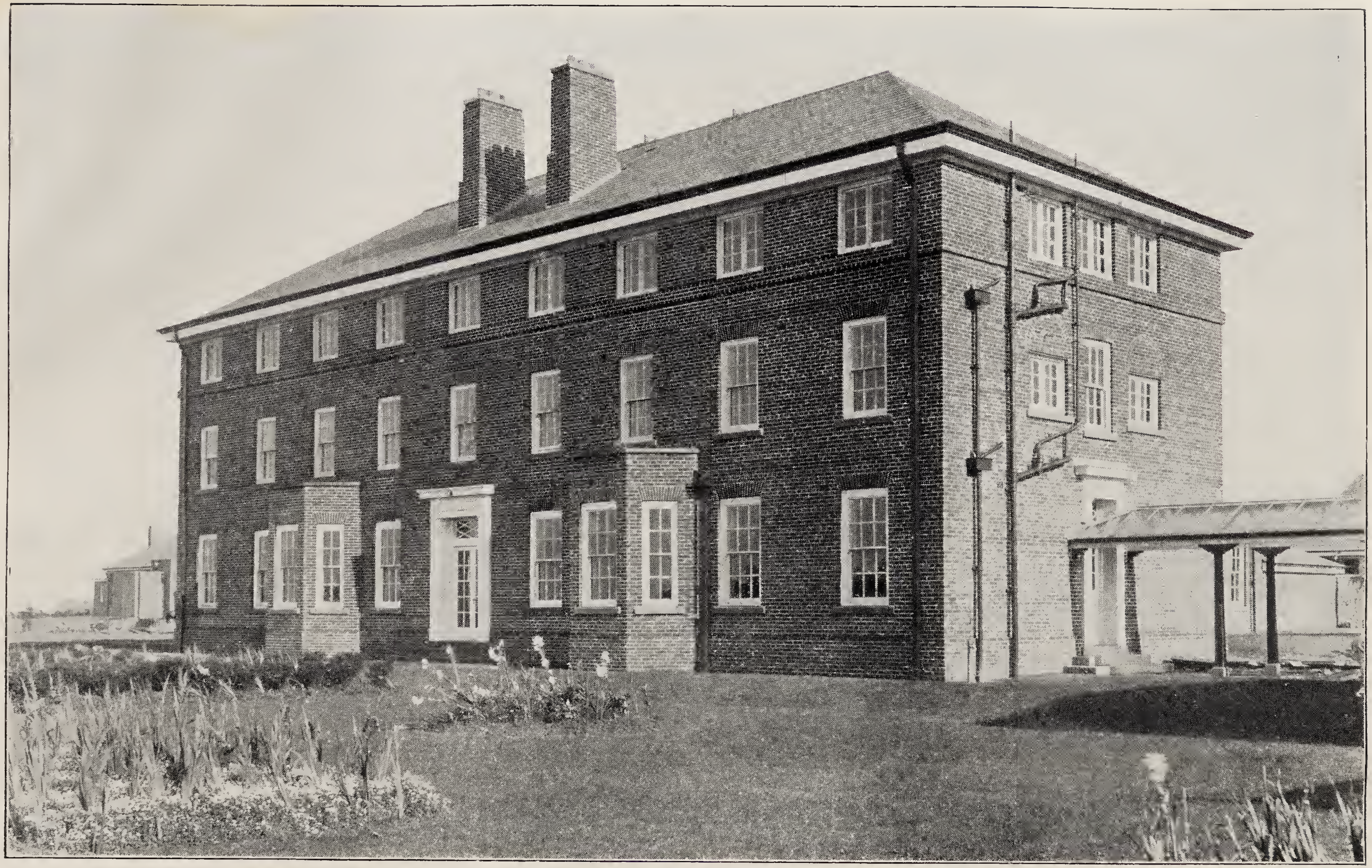
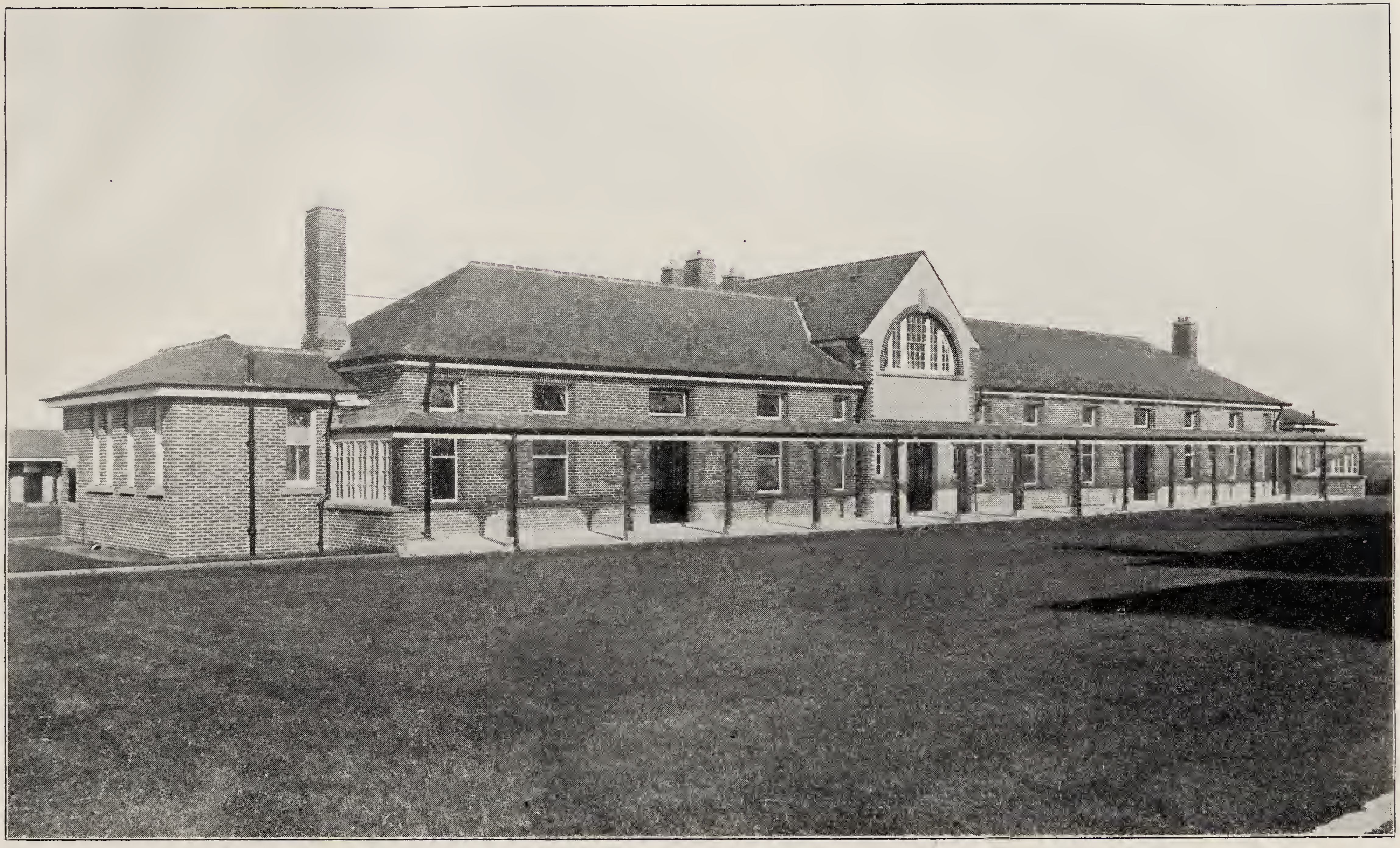
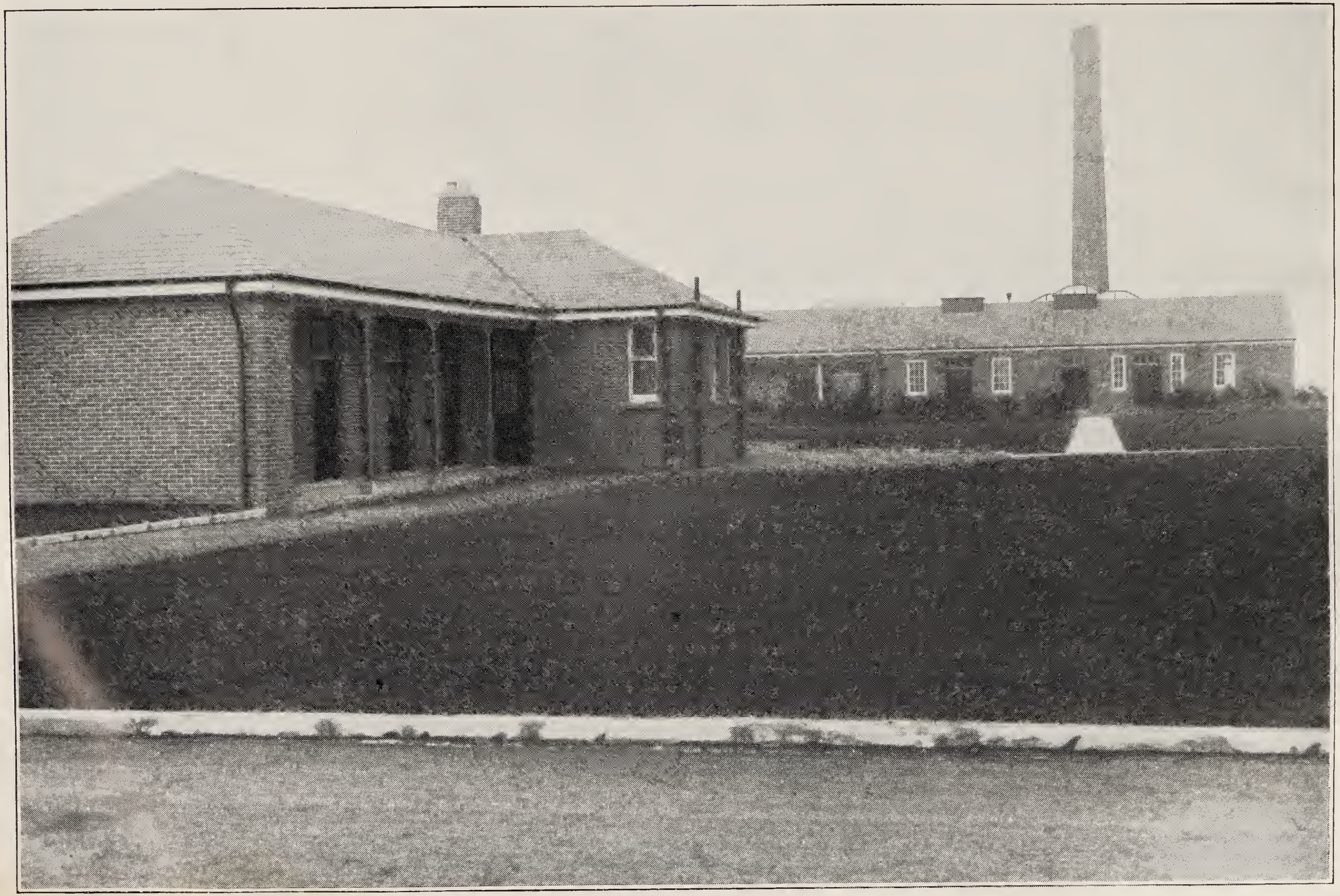


NURSES' AND MAIDS' HOME.

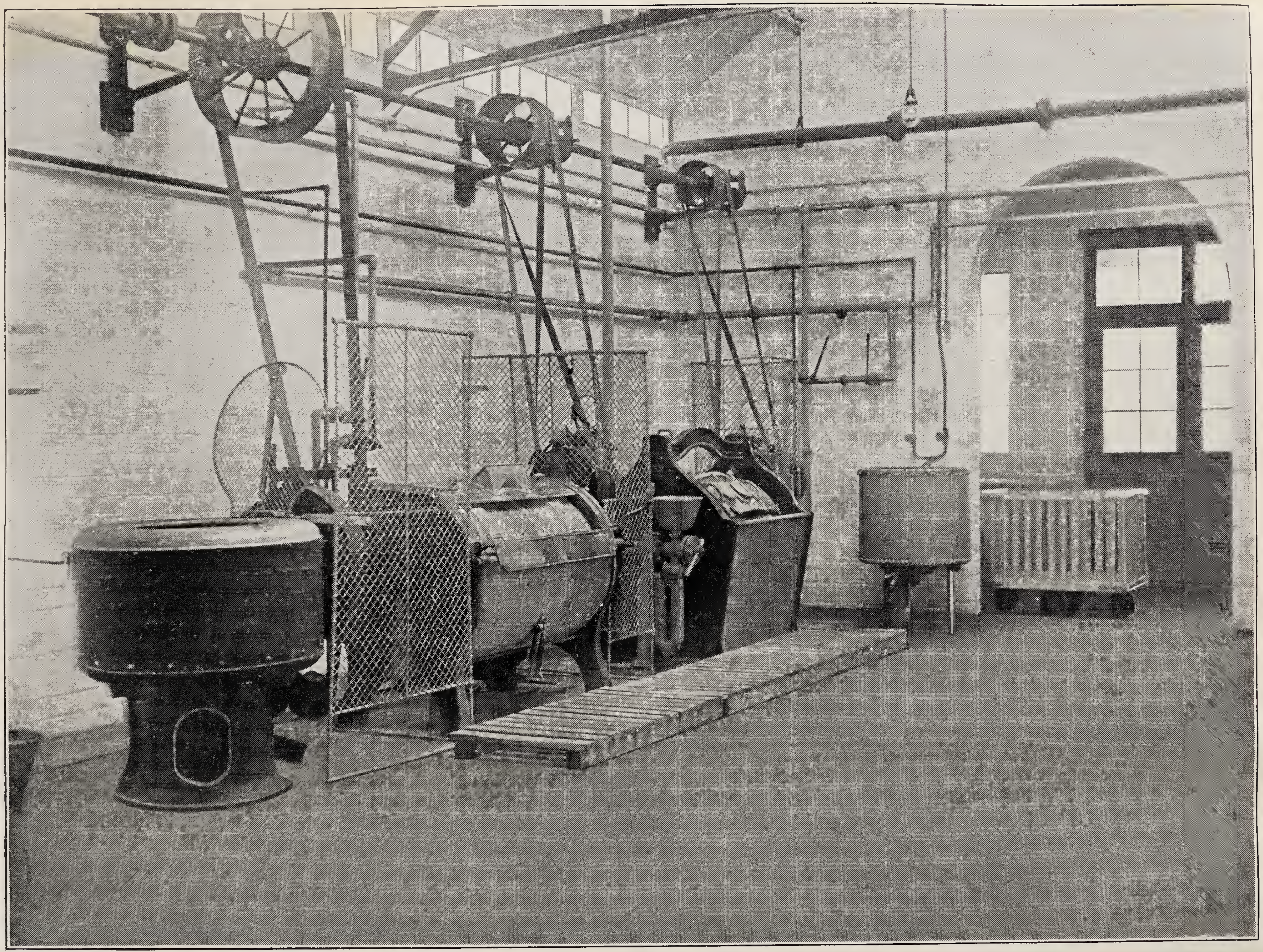
SANATORIUM WARDS.

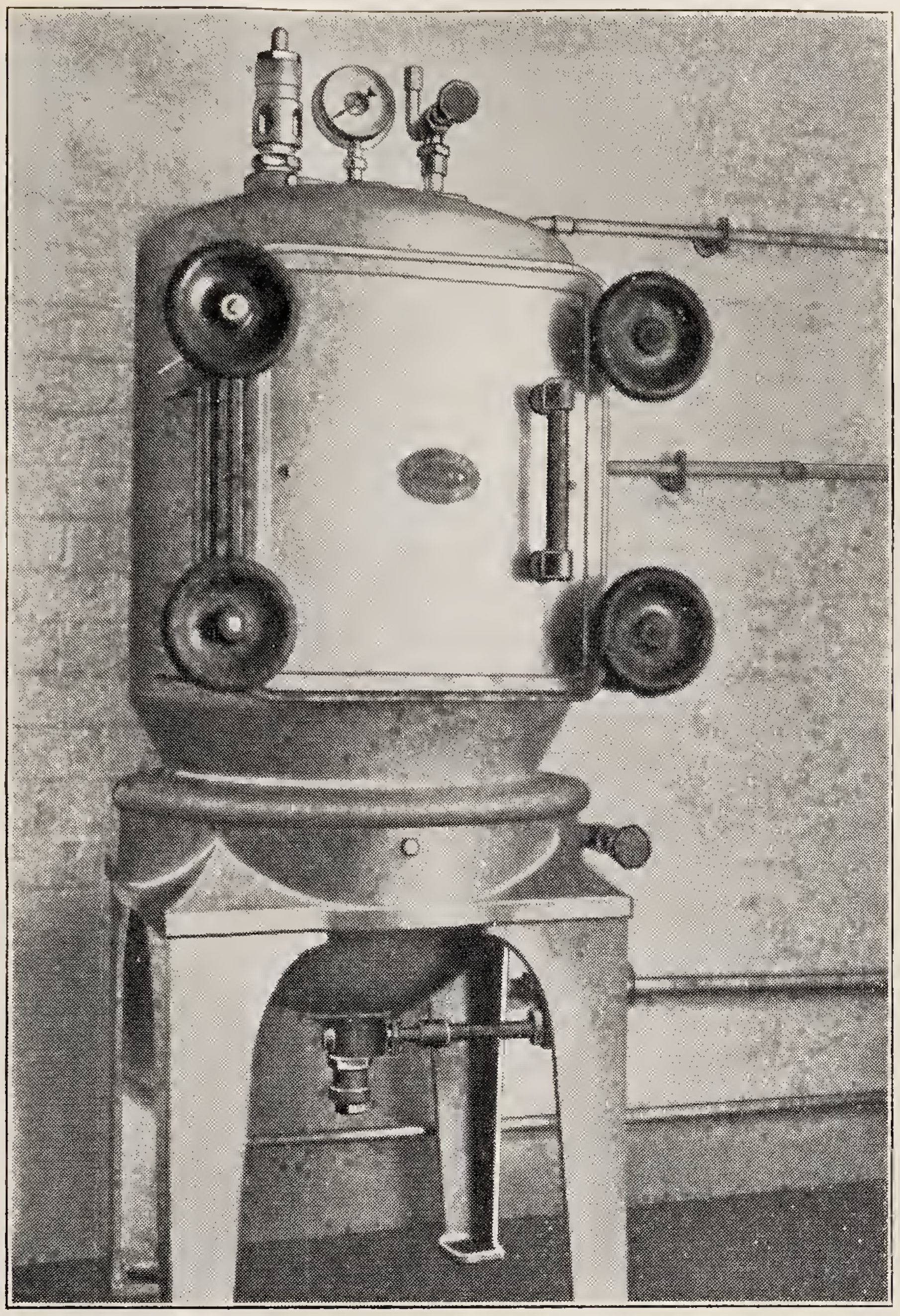


SCARLET FEVER WARDS

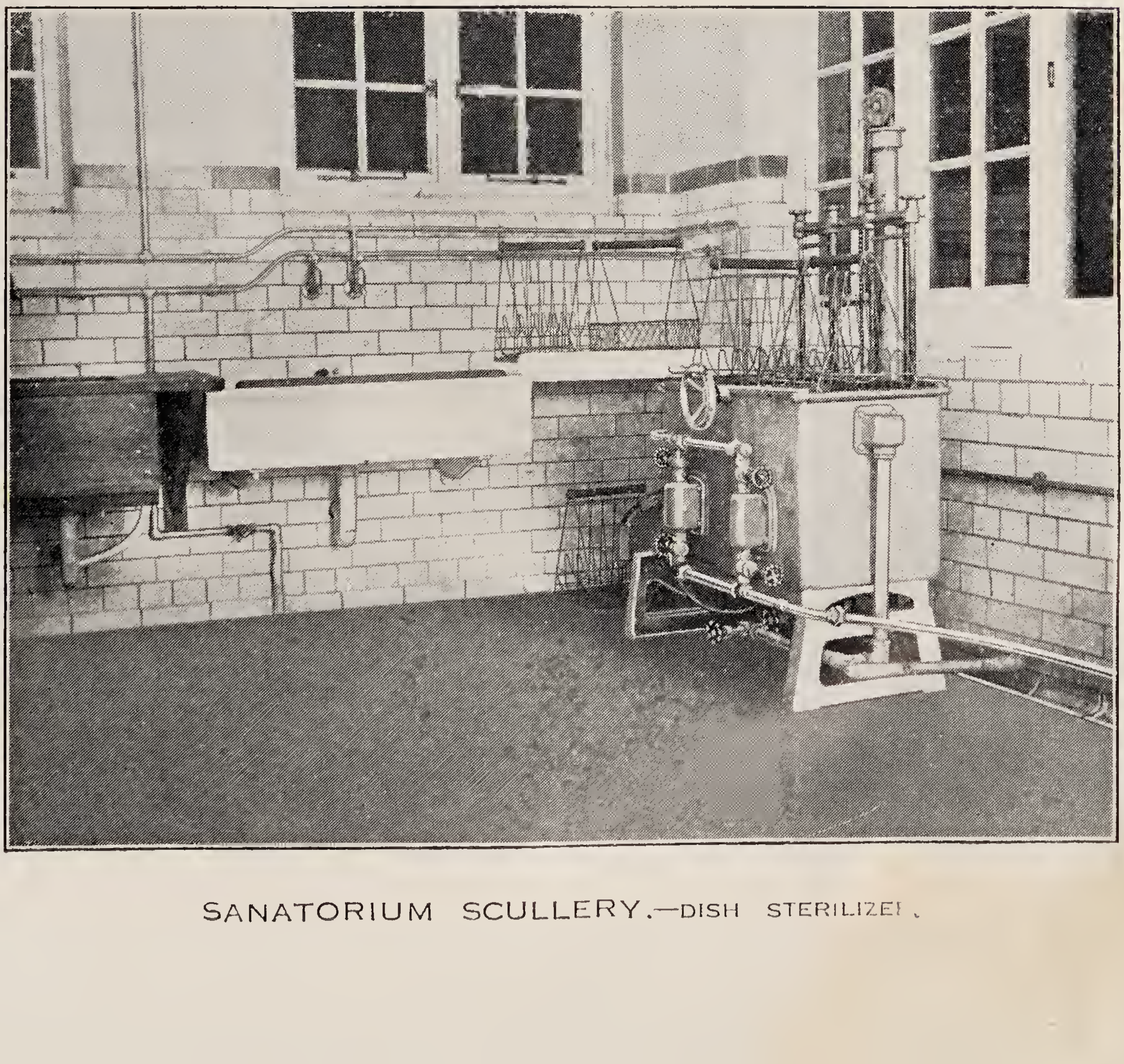


OBSERVATION BLOCK.
(ENGINE HOUSE AND LAUNDRY EEHIND.)





SPUTUM STERILIZER.



SANATORIUM SCULLERY.—DISH STERILIZER.

REPORT, 1927.

Population at Census, 1911	69,643
Do. do. 1921	71,900
Do. (estimated by Reg. Genl.), middle of 1927	78,670
Area of Borough (Excluding Foreshore, 14,196 acres), acres	8,804

	1922	1923	1924	1925	1926	1927
Birth Rate	14·27	13·76	12·90	13·10	11·90	12·18
Academic Corrected Death Rate	—	—	—	10·70	10·12	11·50
Death Rate, Zymotic Diseases	0·25	0·26	0·15	0·14	0·23	0·08
Infantile Death Rate	56	65	63	61	62·5	48

(For various other rates of previous years, see Table VIII, and Text *infra.*)

POPULATION.

The number of New Houses erected and completed during the year was about 504. The number of children attending Elementary Schools is practically constant for five years if allowance is made for Boys transferred to the Boys' Secondary School.

The Registrar General's estimate for the middle of 1926 was 77,970, and for the middle of 1927 was 78,670, which is adopted as a basis for the rates for 1927.

SOCIAL CONDITIONS.

The population is almost entirely residential, with the necessary ancillary occupations. There is one important motor works.

Poor Law Relief :—

Amount of Relief granted during 1927.	No. of Persons in receipt of Relief Jan. 1, 1928.
£12,519	1,184

Southport Infirmary :—

	1923	1924	1925	1926	1927
In-Patients—Total Treated	1,156	1,334	1,468	1,336	1,562
Out-Patients— do.	3,490	3,175	3,425	3,682	3,649

Further assistance is given by the Southport and Birkdale Provident Society, and by the Southport and Birkdale District Nursing Society.

Vital Statistics.

BIRTH-RATE.

The " Corrected " Births numbered 958 of which 480 were males and 478 females. The resulting Birth-rate is 12·18. This is a slight increase on last year.

INFANTILE MORTALITY.

Year	Total Births	Legitimate Births	Illegitimate Births	Total Deaths	Total Rates	Deaths Legitimate	Rate per 1000	Deaths Illegitimate	Rate per 1000
1921	1106	1039	67	77	70	67	64	10	109
1922	1028	965	63	58	56	53	55	5	79
1923	996	937	59	65	65	55	59	10	169
1924	934	876	58	59	63	51	58	8	138
1925	973	917	56	59	61	54	59	5	89
1926	928	863	65	58	62·5	52	60	6	92
1927	958	891	67	46	48	41	46	5	75

DEATH-RATE.

The Death-rate for 1927, after deduction of non-residents registered in the District and the addition of residents not registered in the District. 13·56 per 1,000 per annum, has been attained by applying the number of Deaths, 1,067, to the Registrar-General's estimate of the population for the middle of the year, namely 78,670.

The number of deaths actually registered in the Borough and the Isolation Hospitals was 1,002, of which 462 were males and 540 females. These figures give a gross Death-rate of 12·74 per 1,000 of the population.

If, however, from the above 1,002 deaths are deducted 62 deaths of visitors who came into the town in a precarious state of health, and died after only a short stay here, there remain 940 deaths ; from which, by calculation, a " local " death-rate of 11·95 per 1,000 is obtained.

The deaths of persons over 65 numbered 580, being 54 per cent. of the total deaths. The death-rate, 13·56, may be compared with the average death-rate 13·05 for the five years 1923 to 1927 inclusive. The deaths from Organic Heart Disease and Respiratory Diseases show no striking change. I still feel that the Population is somewhat underestimated.

With respect to the death-rate, 13·56, for 1927, as found above, it should be noted that correction has only been made by deduction of deaths of non-residents registered in this district and the addition of deaths of residents registered in other districts.

The Registrar-General supplied a Factor for Correction, ·848, for Age and Sex, and on applying this to the above rate, an academically corrected death-rate of 11·50 is attained.

I consider the Death-rate, although it is higher than last year, a satisfactory one. In addition to the prevalence of severe Influenza throughout the country during the early months of the year, the bad weather levied a heavy toll of the elderly and old folks who constitute an exceptionally large proportion of the population in the case of Southport.

It will be noted that considerably more than half of the deaths occurred at the age of 65 and upwards.

In estimating the healthiness or otherwise of a given population, even the academic death-rate is insufficient of itself; at least two other rates must be borne in mind for the consideration of the problem, namely, the Infantile Death-rate and the Zymotic Death-rate.

RATIO OF DEATHS IN EACH OF THE VARIOUS AGE GROUPS TO TOTAL DEATHS (100).

	Under 1.	1-2	2-5	5-15	15-25	25-45	45-65	65 and Upwards.
1921......	8·4	1·6	1·7	1·1	3·8	9·3	25·3	48·8
1922......	5·9	1·1	1·8	1·2	3·9	8·6	27·4	50·1
1923......	6·7	2·7	1·3	1·2	2·4	8·7	27·4	49·6
1924......	5·9	2·0	1·5	1·0	2·8	10·0	23·9	52·9
1925......	6·3	1·7	1·3	1·2	3·0	8·3	25·9	52·3
1926......	6·2	0·7	1·2	1·4	2·1	9·1	25·7	53·6
1927......	4·3	0·3	1·1	1·1	2·2	8·3	28.3	54·4

ZYMOTIC DEATH-RATE.

Nine deaths, due respectively to Enteric Fever (1), Measles (2), Whooping Cough (3), and Diarrhœa (3) gave a corrected Zymotic Death-rate of 0·11 per 1,000. This is a very satisfactory Zymotic Death-rate. Probably some, if not all, of the cases of Infantile Diarrhœa were not of an epidemic nature.

CANCER, MALIGNANT DISEASE.

The number of deaths was 143—about the usual incidence. Fifteen per cent. of all deaths of persons 25 years and upwards were due to this condition.

In a population with an age constitution such as ours the rate must necessarily remain apparently high. The deaths are confined practically to the middle aged and the aged.

HEART DISEASE DEATHS.

	Totals	10–20	20–30	30–40	40–50	50–60	60–70	70–80	80–90	90–100	100 Up
Valvular Disease	59	1	1	5	5	8	19	11	8	1	—
Endocarditis	5	—	—	—	1	1	1	1	1	—	—
Auricular Fibrillation ..	6	—	—	—	1	—	4	1	—	—	—
Myocardial Degeneration	39	—	—	—	—	—	5	18	13	2	1
Myocarditis	26	—	—	—	—	—	5	15	6	—	—
Cardiac Weakness	1	—	—	—	—	—	—	1	—	—	—
Fatty Degeneration	5	—	—	—	—	—	2	1	2	—	—
Heart Disease	17	—	—	—	1	3	7	5	1	—	—
Dilatation.............	1	—	—	—	—	—	—	—	1	—	—
Totals	159	1	1	5	8	12	43	53	32	3	1

I have again included a table classifying the deaths from Heart Disease under the various age periods, and it will be seen that by far the majority of these cases are grouped under the ages of 65 and upwards.

I am convinced that these figures do not bear out the true facts. As an example I quote the case of an old lady of over 100 years who was certified as a case of Myocardial Degeneration.

There appears to be a vogue for certifying all deaths over a certain age as heart disease in some form or another.

Our views on Valvular Disease have altered beyond recognition since the days of the war ; the fact that the greater part of the mortality from Valvular Disease occurs over 60 years of age, is striking in itself.

Southport is not alone in this respect ; similar peculiarities occur in other towns of a similar constitution. It cannot be to the advantage of any one to swell the town's apparent death-rate from Cardiac Disease, and I would welcome a " division of the burden."

Table X.—**Birth-rate, Death-rate,** and **Analysis** of **Mortality** during the year 1927.

(*Provisional figures. The rates have been calculated on a population estimated to the middle of* 1927. *The mortality rates refer to the whole population as regards England and Wales, but only to civilians as regards London and the groups of towns. As the registration of stillbirths did not come into operation until* 1*st July,* 1927, *no stillbirths are included.*)

—	Birth-rate per 1,000 total Population.	Annual Death-rate per 1,000 Population									Rate per 1,000 Births.		Percentage of Total Deaths.			
		All Causes.	Enteric Fever.	Small-pox.	Measles.	Scarlet Fever.	Whooping Cough.	Diphtheria.	Influenza.	Violence.	Diarrhœa and Enteritis (under Two years).	Total Deaths under One year.	Certified by Registered Medical Practitioners.	Inquest Cases	Certified by Coroner after P.M. No Inquest.	Uncertified Causes of Death.
England and Wales	16·7	12·3	0·01	0·00	0·09	0·01	0·09	0·07	0·57	0·51	6·3	69	91·7	6·6	0·7*	1·0
107 County Boroughs and Great Towns, including London	17·1	12·2	0·01	0·00	0·12	0·01	0·10	0·08	0·49	0·46	8·3	71	91·9	6.6	0·9*	0·6
155 Smaller Towns (1921 Adjusted Populations 20,000–50,000)	16·4	11·3	0·01	0·00	0·07	0·01	0·08	0·05	0·58	0·41	5·0	68	92·7	5·8	0·3*	1·2
London	16·1	11·9	0·01	0·00	0·04	0·01	0·12	0·09	0·39	0·51	7·5	59	90·3	7·9	1·8*	0·0
Southport	12·18	11·50	0·01	0·00	0·03	0·00	0·04	0·00	0·71	0·37	3·1	48	92·3	3·27	4·03*	0·40

* The Coroners' (Amendment) Act, 1926, which came into operation on the 1st May, 1927, provided for the Registration of deaths on a certificate of the Coroner after P.M. without inquest. These percentages relate therefore to eight months of the year only.

General Housing Conditions.

HOUSING ACCOMMODATION.

Five hundred and four Houses have been erected by private enterprise and by the Corporation during the year.

The cost of labour and materials, especially the latter, both for construction of new and repair of old houses, is still so high that in the presence of restriction on rent it is difficult to get repairs executed.

COMMON LODGING HOUSES.

There are five registered Common Lodging Houses, the same number as last year. The conditions generally inside and out are satisfactory.

Public Baths.

VICTORIA BATHS.

The Baths are now complete after having been remodelled, and are now acknowledged to be second to none. Internally the work is of such a nature as to render the cleansing process more easy, and is of a more sanitary nature than the old wood work.

Swimming Baths.

Three Swimming Baths are available (1st, 2nd and 3rd class), supplied with pure, filtered Sea water filtered by the most up to date filters.

Private (Slipper) Baths.

There are 45 Slipper Baths allotted as follows :—24 for Ladies and 21 for Gentlemen, divided into two classes, 1st and 2nd.

Turkish Baths.

Many improvements have been added to these Baths ; additional cubicles have been fitted up, a new lounge opened in connection with the cooling room, and an entirely new system of heating has been installed.

Bell's system of filtration has been chosen for the continuous filtration of Sea water supplied to the Swimming Baths, and has proved a great success.

Permutit water softening plant has been installed, the softened water being much appreciated by Bathers using the Slipper Baths.

The whole of the building is now heated by radiators and steam pipes, making the Baths more comfortable for Winter Bathing.

CANNING ROAD BATHS.

These Baths serve a very useful purpose in a working-class neighbourhood. 20,000 Free Baths are taken by Boys and Girls in the open air each Summer ; provision is also made for a free wash in connection with the Open-air Bath.

Six Private (Slipper) Baths are available at a small charge of 2d. each person. These Baths are in great demand during the Summer season.

COMPTON ROAD BATHS.

These Baths are also situated in the midst of a thickly populated district. Facilities similar to those at Canning Road with regard to free open-air bathing are provided.

Ten Private (Slipper) Baths are available at a small charge of 2d. each person, the building being heated and fitted with electric light.

Infectious Diseases.

DISEASE.	NOTIFICATIONS.					DEATHS.					CASE MORTALITY.				
Year	1923	1924	1925	1926	1927	1923	1924	1925	1926	1927	1923	1924	1925	1926	1927
Enteric Fever	7	16	4	5	7	—	1	—	1	1	—	6·25	—	20·0	14·3
Scarlet Fever	101	107	132	132	144	—	—	—	1	—	—	—	—	0·76	—
Diphtheria	37	35	44	35	49	1	—	2	1	—	2·7	—	4·54	2·86	—
Measles*	1064	288	672	887	401	9	2	3	5	2	0·84	0·69	0·45	0·56	0·50
Whooping Cough*	121	292	240	418	118	—	4	2	5	3	—	1·37	0·83	1·03	2·54

* Only first case in a house in two months is notifiable.

INCIDENCE RATE PER 1,000 POPULATION.

	Small-pox	Scarlet Fever	Diphtheria	Enteric	Puerperal	Puerperal Pyrexia	Erysipelas
England and Wales	0·38	2·16	1·33	0·09	0·05	0·14	0·38
Southport	0·83	1·83	0·62	0·09	0·01	0·01	0·27

SMALLPOX.

AGE INCIDENCE.

	All Ages	0–1	1–2	2–5	5–15	15–25	25–35	35–45	45–55	55–65	65–75	75 and Upwards
Unvaccinated..........	56	—	—	2	45	6	2	1	—	—	—	—
Vaccinated*	9	—	—	—	—	—	—	—	4	2	3	—
Totals	65	—	—	2	45	6	2	1	4	2	3	—

* Vaccinated in Infancy. This incidence is in accord with the universal experience that the acquired immunity due to vaccination is largely lost after a long period of years.

WHOOPING COUGH.

Cases—118.

Deaths—3.

Mild type.

MEASLES.

Cases—401.

Deaths—2.

Mild type.

VENEREAL DISEASE.

		Out-Patient Attendances.		In-Patient Days.
1921	....	9,188	....	2,323
1922	....	11,130	....	2,144
1923	....	8,883	....	1,327
1924	....	8,436	....	1,314
1925	....	9,506	....	1,476
1926	....	12,871	....	1,976
1927	....	13,299	....	2,456

Venereal Disease.

The increase in attendance does not indicate any greater incidence of the disease in the town, but rather that those who are infected or suspicious of being infected attend more regularly and promptly in order to obtain a rapid and complete cure.

The attendances were 13,299 compared with 12,871 in the previous year. On the other hand the number of new cases is slightly lower, viz. 280 compared with 286 in 1926. The increase in attendances can be accounted for (1) by the appreciation by the public of the advantages of a clinic of this kind where they can seek early advice and receive prompt and thorough treatment in the primary stages of the disease and (2) through the propaganda of the Health Weeks and Health Lectures, and the distribution of literature whereby people have learnt the risks of promiscuous intercourse. Many cases have sought advice purely as a result of this propaganda and no evidence of disease has been found, but the mind and conscience of the individual have been relieved.

IN-PATIENT TREATMENT.

The total number of in-patients treated in the Department was 144, 24 of these being babies.

Six of those suffered from Opthalmia Neonatorum, and were discharged absolutely cured without any affection of the sight.

During the year we had nine births and in each case the infants showed no Clinical or Serological symptons of Congenital V.D. which result is due to the ante-natal treatment previously received by the mother.

A high percentage of cases were discharged cured, in consequence of the good and regular attendances in our out-patients department.

Practitioners in the town appear to be taking greater advantage of the Bacteriological Department for Microscopical and Serological examination of suspicious cases and thereby we have been able to get patients under treatment at an earlier stage.

I am satisfied that there are many cases amongst the working classes who are reporting themselves immediately to the V.D. Clinic who, in the past, would have received inadequate treatment elsewhere.

There are still certain known cases of infected persons and carriers of the disease at large in the town and I would gladly welcome some power by which these persons could be kept under constant observation and definite treatment.

Finally I should like to express my gratitude to the Medical Officers, and the Sister and Members of the staff of the Department who have shown great enthusiasm, aptitude, and keenness, in carrying out this strenuous work, frequently under very difficult and trying conditions and thanks are due to them for the excellent results we are obtaining.

H. BARDSLEY, M.R.C.S.

Director of the Skin and Genito Urinary Department.

Vaccination.

Appended is a Table showing the percentage of unvaccinated infants less than six years of age, found during Medical Inspection of School Children.

	Boys.	Girls.
1909	13·0	14·1
1910	8·3	9·1
1911	4·2	4·7
1912	23·9	21·8
1913	44·0	45·4
1914	50·8	55·7
1915	53·6	49·6
1916	55·6	50·4
1917	60·2	57·5
1918	63·4	63·6
1919	68·8	67·1
1920	68·5	66·7
1921	73·0	68·4
1922	69·0	73·6
1923	69·0	68·0
1924	76·4	72·8
1925	72·9	74·6
1926	77·2	75·5
1927	35·4	38·0

New Hall.

The Isolation Hospital and Sanatorium were formally opened by Sir George Newman on the 14th October, 1927.

The Isolation cases were transferred thither on October 27th, and the Tuberculosis Cases on November 4th.

This modern and adequate establishment is affording great relief, from the pre-existing conditions, to everyone concerned.

Insurance Medical Services.

HEALTH EDUCATION BY INSURANCE COMMITTEES.

The National Health Insurance Act, 1924, Section 50, enacts that Insurance Committees shall make such provision for the giving of lectures and the publication of information on questions relating to health as they think necessary or desirable, and may if they think fit for that purpose make arrangements with local Education Authorities, Universities, and other Institutions. It will be observed this instruction is mandatory.

When Sir George Newman was here recently he strongly urged the desirability of pursuing this branch of Public Health work. In other Centres the following things have already been done :—

(a) Public lectures, often accompanied by exhibition of cinematograph films or lantern slides (21 Committees).

(b) Arrangement of lectures by Insurance Practitioners to persons on their panel lists (12 Committees).

(c) Distribution of leaflets, pamphlets, blotters, etc., on the care of health in such matters as personal hygiene, eating, drinking, fresh air, etc., and publication of posters (42 Committees).

(d) Participation in Health Week Campaigns, Exhibitions, etc., (25 Committees).

Sir George Newman further urged the desirability of giving lectures to the Panel Doctors themselves.

Such methods are amongst those that might well be adopted to diffuse the knowledge of how to **keep** the health of the healthy members of the population :—" to equip every citizen with knowledge of the ways in which the laws of nature may be observed and respected even in an excessively urbanized environment."

Tuberculosis Report.

Cases notified :—

	Pulmonary.	Non-Pulmonary.	Total.
Males	32	11	43
Females	30	10	40
	62	21	83

Duplicate notifications excluded.

DISPENSARY.

Tuberculosis cases : 1st visits	58
Re-visits	1,507
Contacts visited	4,015
Contacts examined by Tuberculosis Officer : 1st visits	7
Re-visits	1
Clinical examinations by Tuberculosis Officer : 1st examinations	62
Re-examinations	449
Clinical examinations by Consulting Officer	53
Patients seen by Health Visitor at Dispensary	524
Hours in Dispensary	308
Total visits to Dispensary	1,088
Individual Patients attending Dispensary	288
,, Contacts ,, ,,	8

NEW CASES AND MORTALITY DURING 1927.

Age Periods.	New Cases.				Deaths			
	Pulm'ry.		Non-Pulm'ry.		Pulm'ry.		Non-Pulm'ry	
	M.	F.	M.	F.	M.	F.	M.	F.
0	—	—	—	—	—	—	1	1
1	—	—	3	3	—	—	1	—
5	2	—	4	5	—	—	—	2
10	1	—	1	—	—	1	—	—
15	2	—	2	—	—	—	—	1
20	1	9	1	—	2	4	—	—
25	7	4	1	2	4	2	—	—
35	16	7	1	1	7	4	—	1
45	7	6	1	—	8	5	—	—
55	2	2	—	—	—	2	—	—
65 and upwards	1	3	—	—	2	1	—	—
Totals	39	31	14	11	23	19	2	5

TABLE I.

TUBERCULOSIS SCHEME.

Return showing the work of the Dispensary (or Dispensaries) during the year 1927.

DIAGNOSIS.	PULMONARY.				NON-PULMONARY.				TOTAL.					
	Adults		Children		Adults		Children		Adults		Children			
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.		
A.—NEW CASES examined during the year (excluding contacts) :														
(*a*) Definitely tuberculous ...	28	26	3	1	5	4	6	6	33	30	9	7	=79	83
(*b*) Doubtfully tuberculous...	—	—	—	—	—	—	—	—	—	—	—	—	=—	
(*c*) Non-tuberculous............	1	3	—	—	—	—	—	—	1	3	—	—	= 4	
B.—CONTACTS examined during the year :														
(*a*) Definitely tuberculous ...	—	3	—	—	—	—	—	—	—	3	—	—	= 3	84
(*b*) Doubtfully tuberculous...	2	7	13	6	—	—	—	—	2	7	13	6	=28	
(*c*) Non-tuberculous............	12	20	10	11	—	—	—	—	12	20	10	11	=53	
C.—CASES written off the Dispensary Register as														
(*a*) Cured	—	—	—	—	—	—	—	—	—	—	—	—	——	
(*b*) Diagnosis not confirmed or non-tuberculous (including cancellation of cases notified in error)	13	23	10	11	—	—	—	—	13	23	10	11	=57	
D.—NUMBER OF PERSONS on Dispensary Register on December 31st :—														
(*a*) Diagnosis completed	105	86	10	8	19	19	27	16	124	105	37	24	=290	319
(*b*) Diagnosis not completed	2	7	13	6	—	—	—	1	2	7	13	7	= 29	

1. Number of persons on Dispensary Register on January 1st, 1927 ...	304
2. Number of patients transferred from other areas and of "lost sight of" cases returned	6
3. Number of patients transferred to other areas and cases "lost sight of"	38
4. Died during the year	63
5. Number of observation cases under A (*b*) and B (*b*) above in which period of observation exceeded 2 months ...	10
6. Number of attendances at the Dispensary (including Contacts)	1096
7. Number of attendances of non-pulmonary cases at Orthopaedic Outstations for treatment or supervision	15
8. Number of attendances, at General Hospitals or other Institutions approved for the purpose, of patients for	
(*a*) "Light" treatment	52
(*b*) Other special forms of treatment...	—

9. Number of patients to whom Dental Treatment was given, at or in connection with the Dispensary ...	6
10. Number of consultations with medical practitioners :—	
(*a*) At Homes of Applicants ...	28
(*b*) Otherwise	28
11. Number of other visits by Tuberculosis Officers to Homes	—
12. Number of visits by Nurses or Health Visitors to Homes for Dispensary Purposes	1565
13. Number of	
(*a*) Specimens of sputum, etc., examined	387
(*b*) X-ray examinations made in connection with Dispensary work	113
14. Number of Insured Persons on Dispensary Register on the 31st December	154
15. Number of Insured Persons under Domiciliary Treatment on the 31st December	16
16. Number of reports received during the year in respect of Insured Persons :—	
(*a*) Form G.P. 17	18
(*b*) Form G.P. 36	5

TABLE II.—RESIDENTIAL INSTITUTIONS.

(A) AVERAGE NUMBER OF BEDS AVAILABLE FOR PATIENTS DURING THE YEAR 1927.

—	Observation.	Pulmonary Tuberculosis.		Non-Pulmonary Tuberculosis.		Total.
		" Sanatorium " Beds.	"Hospital" Beds.	Disease of Bones and Joints.	Other Conditions.	
Adult Males	1	12	2	—	—	15
Adult Females	1	11	2	—	—	14
Children under 15	—	3	—	—	—	3
TOTAL	2	26	4	—	—	32

(B) RETURN SHOWING THE EXTENT OF RESIDENTIAL TREATMENT DURING THE YEAR 1927

			In Institutions on Jan. 1.	Admitted during the year.	Discharged during the year.	Died in the Institutions.	In Institutions on Dec. 31.
Number of Patients	Adults	M.	9	28	24	8	5
		F.	13	21	24	3	7
	Children	M.	3	1	1	—	3
		F.	5	3	6	—	2
Number of Observation Cases	Adults	M.	—	2	2	—	—
		F.	—	4	3	—	1
	Children	M.	—	6	4	—	2
		F.	—	1	—	—	1
	Total ..		30	66	64	11	21

TABLE III.

Return showing the immediate results of treatment of Patients and of observation of doubtful cases discharged from Residential Institutions during the year 1927.

Classification on admission to the Institution.		Condition at time of discharge.	Duration of Residential Treatment in the Institution.												Total
			Under 3 months.			3—6 months			6—12 months			More than 12 months			
			M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.	
Pulmonary Tuberculosis.	Class T.B. minus.	Quiescent	—	—	—	2	1	—	—	3	—	—	—	—	6
		Improved	1	—	—	—	2	—	1	2	1	—	—	—	7
		No material improvement	1	—	—	—	—	—	—	—	—	—	—	—	1
		Died in Institution	—	—	—	1	—	—	—	—	—	—	—	—	1
	Class T.B. plus. Group 1.	Quiescent	—	—	—	3	—	—	—	—	—	—	—	—	3
		Improved	—	1	—	1	—	—	—	1	—	—	—	—	3
		No material improvement	1	—	—	—	1	—	—	—	—	—	—	—	2
		Died in Institution	—	—	—	—	—	—	—	—	—	—	—	—	—
	Class T.B. plus. Group 2.	Quiescent	—	—	—	1	1	—	—	—	—	—	—	—	2
		Improved	1	—	—	3	2	—	2	2	—	1	—	—	11
		No material improvement	—	2	—	—	—	1	—	1	—	—	—	—	4
		Died in Institution	1	—	—	1	—	—	1	—	—	—	—	—	3
	Class T.B. plus. Group 3.	Quiescent	—	—	—	—	—	—	1	1	—	—	—	—	2
		Improved	—	1	—	—	1	—	1	—	—	—	—	—	3
		No material improvement	2	—	—	2	2	—	1	2	—	—	—	—	9
		Died in Institution	4	2	—	—	1	—	—	—	—	—	—	—	7
Non-Pulmonary Tuberculosis.	Bones & Joints.	Quiescent or Arrested	—	—	—	—	—	—	—	—	—	—	—	—	—
		Improved	—	—	—	—	—	1	—	1	1	—	—	2	5
		No material improvement	—	—	—	—	—	—	—	—	—	—	—	—	—
		Died in Institution	—	—	—	—	—	—	—	—	—	—	—	—	—
	Abdominal.	Quiescent or Arrested	—	—	—	1	—	—	—	—	—	—	—	—	1
		Improved	—	—	—	—	—	1	—	—	—	—	—	1	2
		No material improvement	—	—	—	—	—	—	—	—	—	—	—	—	—
		Died in Institution	—	—	—	—	—	—	—	—	—	—	—	—	—
	Other Organs.	Quiescent or Arrested	—	—	—	—	—	—	—	—	—	—	—	—	—
		Improved	—	—	1	—	—	—	—	—	—	—	—	—	1
		No material improvement	—	—	—	—	—	—	—	—	—	—	—	—	—
		Died in Institution	—	—	—	—	—	—	—	—	—	—	—	—	—
	Peripheral Glands.	Quiescent or Arrested	—	—	—	—	—	—	—	—	—	—	—	—	—
		Improved	—	—	—	—	—	1	—	—	1	—	—	—	2
		No material improvement	—	—	—	—	—	—	—	—	—	—	—	—	—
		Died in Institution	—	—	—	—	—	—	—	—	—	—	—	—	—
			Under 1 week.			1—2 weeks.			2—4 weeks.			More than 4 weeks.			
Observation for purpose of diagnosis.		Tuberculous	—	—	—	—	—	—	—	—	—	—	1	1	2
		Non-tuberculous	—	—	—	—	1	—	—	—	—	2	—	1	4
		Doubtful	—	—	—	—	—	1	—	—	1	—	1	4	7

TABLE IV.—(a) PULMONARY TUBERCULOSIS.

Annual Return showing in summary form the condition of all Patients whose case records are in the possession of the Dispensary (or Dispensaries) at the end of 1927, arranged according to the years in which the Patients first came under Public Medical Treatment for pulmonary tuberculosis, and their classification as shown on Form A.

Condition at the time of the last record made during the year to which the Return relates.				Previous to 1926.					1926.					1927.				
				Class T.B. minus.	Class T.B. plus.				Class T.B. minus.	Class T.B. plus.				Class T.B. minus.	Class T.B. plus.			
					Group 1.	Group 2.	Group 3.	Total (Class T.B. plus).		Group 1.	Group 2.	Group 3.	Total (Class T.B. plus).		Group 1.	Group 2.	Group 3.	Total (Class T.B. plus).
ALIVE.	Discharged as cured.	Adults	M.	35	8	2	1	11	1	—	—	—	—	—	—	—	—	—
			F.	22	1	1	—	2	2	1	—	—	1	—	—	—	—	—
		Chil-dren.	M.	18	2	—	—	2	1	—	—	—	—	—	—	—	—	—
			F.	13	2	—	—	2	—	—	—	—	—	—	—	—	—	—
	Disease arrested.	Adults	M.	29	2	3	—	5	8	1	1	—	2	1	1	1	—	2
			F.	24	6	6	—	12	5	—	—	1	1	2	—	2	—	2
		Chil-dren.	M.	—	5	—	—	5	1	—	—	—	—	—	—	—	—	—
			F.	4	1	1	—	2	—	—	—	—	—	—	—	—	—	—
	Disease not arrested.	Adults	M.	6	4	14	5	23	1	1	2	5	8	3	3	9	2	14
			F.	3	3	7	3	13	2	2	3	1	6	3	1	7	2	10
		Chil-dren.	M.	—	—	—	—	—	1	—	—	—	—	3	—	—	—	—
			F.	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—
CONDITION NOT ASCERTAINED DURING THE YEAR.				—	—	—	—	—	3	—	—	—	—	1	—	—	—	—
LOST SIGHT OF OR OTHERWISE REMOVED FROM DISPENSARY REGISTER.				52	17	29	20	66	18	1	2	4	7	11	—	—	—	—
DEAD.		Adults	M.	16	11	32	105	148	2	—	1	3	4	2	—	—	8	8
			F.	10	4	26	84	114	1	—	1	6	7	—	—	—	4	4
		Chil-dren.	M.	—	—	1	3	4	—	—	—	1	1	—	—	—	—	—
			F.	1	—	—	4	4	—	—	—	—	—	—	—	—	—	—
Totals				235	66	122	225	413	46	6	10	21	37	26	5	19	16	40

TABLE IV.—(b) NON-PULMONARY TUBERCULOSIS.

Annual Return showing in summary form the condition of all Patients whose case records are in the possession of the Dispensary (or Dispensaries) at the end of 1927, arranged according to the years in which the Patients first came under Public Medical Treatment, and their classification as shown on Form A.

Condition at the time of the last record made during the year to which the Return relates.				Previous to 1926.					1926.					1927.				
				Bones and Joints.	Abdominal.	Other Organs.	Peripheral Glands.	Total.	Bones and Joints.	Abdominal.	Other Organs.	Peripheral Glands.	Total.	Bones and Joints.	Abdominal.	Other Organs.	Peripheral Glands.	Total.
ALIVE.	Discharged as cured.	Adults	M.	5	—	—	14	19	—	—	—	—	—	—	—	—	—	—
			F.	3	—	1	12	16	1	—	—	1	2	—	—	—	—	—
		Children	M.	10	8	1	50	69	—	1	—	—	1	—	—	—	—	—
			F.	6	8	5	40	59	—	—	—	—	—	—	—	—	—	—
	Disease arrested.	Adults	M.	6	1	2	—	9	—	—	—	—	—	—	—	1	1	2
			F.	3	—	—	3	6	1	—	1	1	3	—	—	—	—	—
		Children	M.	5	—	—	7	12	1	—	—	4	5	—	—	—	1	1
			F.	3	—	—	6	9	—	—	—	1	1	—	—	—	1	1
	Disease not arrested.	Adults	M.	1	—	—	—	1	—	—	—	—	—	1	2	—	—	3
			F.	2	—	1	1	4	—	—	—	2	2	3	—	—	—	3
		Children	M.	2	1	1	—	4	—	—	—	—	—	1	—	1	2	4
			F.	2	—	—	2	4	2	1	—	—	3	—	—	—	—	—
TRANSFERRED TO PULMONARY				1	1	1	6	9	—	—	—	—	—	1	—	—	3	4
CONDITION NOT ASCERTAINED DURING THE YEAR.				—	—	—	—	—	—	—	1	—	1	—	—	—	—	—
LOST SIGHT OF OR OTHERWISE REMOVED FROM DISPENSARY REGISTER				15	6	2	20	43	1	1	3	2	7	—	—	—	—	—
DEAD.		Adults	M.	5	—	2	—	7	—	—	1	—	1	1	—	—	—	1
			F.	3	2	3	1	9	—	—	1	—	1	—	—	—	—	—
		Children	M.	2	—	5	—	7	—	—	—	—	—	—	1	—	—	1
			F.	2	6	2	3	13	—	—	1	—	1	—	—	1	—	1
TOTALS				76	33	26	165	300	6	3	8	11	28	7	3	3	8	21

TUBERCULOSIS.

We are now in possession of wards which are the last word in modern construction. They comprise eleven beds for males and eleven for females. There are in addition five shelter beds on each side. It will shortly be necessary to add shelters for about eight additional cases ; the foundations for these have been constructed.

The site is suitable and faces South East. Whether it was due to the change of scene or some other alteration of environment, it is a fact that many patients whose condition tended to remain stationary at Shaftesbury Road immediately commenced to put on weight and improve at the New Hall Sanatorium. The Sanatorium is one to which no patient need hesitate to go. Observation beds have been arranged for cases requiring further investigation and diagnosis. It is occasionally voiced that a patient is afraid of contracting the disease by association with frank cases of Pulmonary Tuberculosis. This risk is non-existent, and the sooner this is realized the better, for those who hesitate reduce their chances of improvement to a sadly low degree.

Sputum mugs containing sputum are collected on trays and taken to the Sputum Sterilizer by a nurse. The Sputum Sterilizer is filled up to a certain level with water in which Carbonate of Soda is dissolved. The mugs are emptied into this solution and placed bottom upwards on a wire tray in the upper part of the Sterilizer, Steam is admitted to a pressure of 12 lbs. thus giving a temperature of approximately 245° F., which is maintained for 20 minutes.

The Sterilizer for the eating utensils is a tank divided by a central partition. The articles are placed in wire baskets slung over the tank. In the tank the dishes are subjected to water brought to boiling point by the admission of steam, and a constant current is set up by means of fans worked by a rotary engine at the side.

The dishes are kept in this compartment for 10 minutes after boiling point has been reached and are then rinsed in a second compartment in boiling water before being removed and dried.

Photographs of these sterilizers are appended.

The bogey of infection is not limited to the patients ; it has been known to us for some time that some of our local practitioners have advised patients not to enter the Sanatorium for this reason. It is hoped that these remarks may have the effect of stopping this, and that the local doctors will support us in obtaining cases in the early stage, and so influence their patients that no delay is suffered in beginning Sanatorium treatment. Only too often are we exhorted to admit for one reason or another a patient in the **last** stage of the disease ; we are convinced that this is a wrong policy and only enhances the fears of those who otherwise would come to us at a time when some satisfactory result might be achieved.

It is our opinion that many of the more hopeless cases should be admitted to the Ormskirk Union Hospital, or, in cases where there is no overcrowding, nursed at home.

Again we find cases in which, in addition to the above considerations, there seems to be a desire on the part of a medical man to treat the case at home. Many of these cases have come to us later and are astonished to learn that they might have retained their small savings by taking advantage of the Tuberculosis scheme which has been organised for this purpose. It is always a poor principle to make a patient pay who is unable to work and who may have some small sum saved by strenuous effort in past years, for it must be remembered that when the time comes for the patient to take up duty again, this "nest-egg" may be indispensable in tiding over that difficult period when he must once more accustom himself to the strain and routine of a busy life.

There is a type of case for which nothing can be done, in which there appears to be no "resistance" and no known way of supplying it. Such cases are deplorable; neither Sanatorium treatment nor any other form appears to produce any result and the disease goes ahead without check. These cases usually commence at an age when the resources of the organism are being drained for development.

More X-ray work has been done by the independent Radiologist; and we would remember the kindly assistance afforded to us by the late Dr. Oram, whose death, to our loss, occurred in December.

One case with rather bad family history is being treated by Artificial Pneumo-thorax with satisfactory results. Progress so far has borne out the decision arrived at. It is impossible to extend this form of treatment until the X-ray apparatus is installed at New Hall, but this it is hoped will be accomplished before the autumn.

LIGHT TREATMENT.

Four thousand years ago the sun was being worshipped as a health-giving deity. The Egyptians worshipped their sun-god "Ra," and the Babylonians "the sun of life" "Tamuz" who "sails upon his ark behind the clouds of winter" to reappear and revivify when the raining season is past.

The history of light treatment is a long one. Omitting reference to the earliest work, in 1735 one Thomas Fiennus used the sun's rays through a lens for cauterizing cancerous growths of the lip. In 1840 Ollier and Poncet of Lyons published observations on the treatment of Tuberculous Arthritis by sunlight.

The pioneer of modern Heliotherapy is Rollier at Leysin, and his clinic is world-renowned. He has done much to revolutionize the treatment of surgical Tuberculosis and the success which he attains with his conservative methods is truly remarkable. The intensity of the sun's rays and the sharp purity of the air at Leysin are conditions which we lack in this country, though it must be remembered that, in the South, Gauvain has achieved excellent results in children by treatment of surgical Tuberculosis on lines similar to those of Rollier.

Even in the North and during a year when the sun seemed loth to shine, I have seen a patient come to the Clinic as deeply bronzed as another just returned from Rollier's Clinic, and this was achieved by sun baths in the backyard !

Speaking generally Spring and Winter with their accompanying damp, cold, and overcast sky, make up a period when natural Heliotherapy in this country is largely impossible, and we have to rely upon Artificial Sunlight during a great part of the year. In towns the difficulty of obtaining natural sunbaths is further augmented by obvious circumstances. So far we have no Solarium.

Charcot in 1858 pointed out that the active rays of the sun were the chemical or ultra-violet rays. He pointed out the similarity between the Erythema produced by exposure to the sun and that produced by the arc-light. He showed that this Erythema was preventable by interposing uranium glass which obstructs the ultra-violet rays.

Finsen's work in the treatment of Lupus with the Finsen lamp is well known. He utilised the rays from a short-flame carbon-arc by focussing these through quartz lenses on to the Lupoid patch and his work has been the main incentive to the present progress in Artificial Sunlight treatment.

Artificial light lamps may be broadly divided into Arc-Lamps and Mercury-Vapour Lamps. In the former the arc is usually forced between two carbon poles, and in some lamps these carbons are cored with certain metals to increase the output of ultra-violet rays. The ultra-violet rays from such lamps are not so intense as those from the mercury-vapour lamp ; but the rays approximate in character very closely to those of the sun on a clear brilliant day. These lamps are used for tonic treatment, and exposure to the rays increases the body resistance to infection ; the general feeling of well-being resulting compares with that produced by a natural sunbath.

In mercury vapour lamps the arc is struck between two columns of mercury enclosed in a tube made of quartz glass which permits the ultra-violet rays to pass through it. These lamps give more intensity in the ultra-violet ray output, especially in respect to the rays of shorter wave-length.

The lamps installed at Church Street are of the long-flame carbon-arc type ; the carbons are cored with metal so that when measured by the Spectroscope, the spectrum, similar to that of the sun, gives an intensity of ultra-violet rays only found in Nature on a bright clear day. A comparison with natural sunlight made in January showed that the sun gave long-wave ultra-violet rays of poor intensity down to about 3,500 Angstrom Units. The Clinic lamps showed intense bands between 4,000 and 3,000, another intense band at 2,500 A.U., and readings as low as 2,100 A.U. could be obtained though the intensity was very low and tailed off between 2,500 and 2,100 A.U. (Rays are measured by Angstrom Units. An Angstrom Unit is one ten-millionth part of a millimetre, and the figures above represent the wave-length of the rays).

Mercury vapour lamps, owing to their greater intensity, are better fitted for local treatment of lupus and joint conditions than for general tonic treatment. At the same time satisfactory results are obtained in the latter, and for general use ; where time is a factor, the mercury vapour lamps will be the type used, for the time of exposure is very short—an initial " dose " being an irradiation of one or two minutes.

We have not been long enough in possession of the carbon lamps to discuss our results, but the cases treated have reacted satisfactorily during the short time under review, and it will be hoped that a more convincing statement may be made in the next report. Our installation is intended for patients from the school clinics, the Tuberculosis clinics, and the Welfare clinics. At present we have amongst others three cases of Lupus attending and one case of Tuberculosis of the elbow joint. The relief of pain and reduction of swelling in the last case have been very noticeable.

There is prospect that mercury-vapour lamps will some day be a part of the equipment of the home, just as the electric radiator is to-day ! Nevertheless it must be remembered that the mercury vapour lamp can be a dangerous weapon, and before any sick person submits himself to artificial light treatment there should be an examination by a medical man experienced in this form of therapy.

General Sanitary Work.

Only 23 cesspools are in existence in the Borough.

There are at the present time 89 privies in the Borough. Of these, 84 are outside the sewer area. The remaining 5 are at the present time under notice to convert into self-cleansing water-closets.

Some extension of sewerage capacity is becoming necessary.

GENERAL SANITARY WORK.

The following Table shows the nature and amount of work done during the year by the Highways Department under orders sent to it by the Health Department, and also the corresponding figures for the two preceding years :—

	1925	1926	1927
Houses drained or re-drained	*470	512	249
House drains unstopped	629	495	426
Midden privies converted into W.C.'s	27	14	12
Bristol ejects and trough closets converted into fresh-water closets	23	25	18
Wet ashpits converted into dry	0	0	0
Sundry structural nuisances abated	216	221	164
Totals	1,365	1,267	869

* Including new connections at Ainsdale.

It will be noticed there is a considerable fall in the figures in the above Table.

The whole of the houses within the sewer area in the Borough now having been connected to the Public Sewer, and a greater amount of work carried out by private contractors accounts for the rest of the reduction. Further work, exceeding in the aggregate that referred to in the Table, has been completed under Private Contract.

ASHBINS.

Ashbins should be used for the temporary deposit of ashes and other similar refuse not subject to decomposition ; hence the name " Ashbin." It is nevertheless the custom to pile into the ashbin everything which it is wanted to get rid of, and which, being out of sight, can also be out of mind.

It would be an advantage if people would endeavour to get rid of and destroy at the house more of the refuse than they do ; in particular it would be better if worthless waste paper could be burnt at the house instead of being placed in the ashbin.

The disposal of this waste paper is becoming a definite problem in itself and will have to be taken seriously.

SMOKE ABATEMENT.

There are practically no factory chimneys requiring observation. Large chimneys, however, are watched with great persistence, and very little ground for complaint arises.

I refer to the table (*infra*) giving deposits from the atmosphere here and elsewhere, which completely demonstrates the remarkable relative clearness of the local atmosphere.

ABSTRACT OF WORK OF SANITARY INSPECTORS.

Total Visits	45,707
Complaints received from public	1,003
Inspections on complaints	1,003
Miscellaneous Inspections	6,424
Houses completely inspected—for in-going tenants, sickness, etc.	839
Re-inspections relating to sanitary defects under notice, etc.	3,025
Routine Inspections of Special Premises :—	
Factories and Workshops, including Bakehouses	324
Common Lodging-houses	250
Stable Premises	54
Offensive Trades	77
Milk Shops	317
Smoke Observations (one hour each)	65
Sanitary Defects Remedied :—	
Houses re-drained, or drains amended, etc	387
Privies, etc., converted into W.C.'s	49
Miscellaneous Nuisances, etc., remedied	878
Total	13,692
Notices Served for Abatement of Nuisances, etc. :—	
Verbal	78
Preliminary	228
Statutory	213
Sewer complaints reported to Highway Department	58
Sanitary Certificates issued	11

Infectious Diseases :—

Inquiries into Cases	17,676
Patients removed to Isolation Hospital	243
Houses disinfected	381
Bedding disinfected	457
Schools disinfected	7
Stables and Cowsheds disinfected	2
Notices to School Attendance Officers	1,365
Notices to Free Library	1,250
Notices to School Medical Officer	1,115

Consumption :—

Cases notified	98
Pulmonary	77
Non-Pulmonary	21
Number of Visits to Tuberculosis Patients	1,591
Patients' Visits to Dispensary	1,090
Examined by Tuberculosis Officer	545
Enquiries—Contacts	4,126

ABATEMENT OF NUISANCES.

Only 3 per cent. of the total Nuisances reported remained wholly or partly unabated at the end of the year. Viewed in the light of the present prevailing difficulties, this is to be considered extremely satisfactory.

REPORT ON ABATEMENT OF NUISANCES FOR THE YEAR.

It represents	1,680
Cases of which	1,621

(97 per cent.) have been satisfactorily complied with. The rest are under enquiry as to progress made.

The remaining number 59 are classified as follows :—

Partially complied with	32
Deferred for further negotiation	19
Work in Progress	1
In Contractors' Hands	39

SANITARY CERTIFICATES.

Householders are strongly advised to have the Drains and Sanitary Fitments of their dwellings inspected and tested trienially. These occasional examinations act as an insurance against sickness from environmental defects.

HOUSING (INSPECTION OF DISTRICT) REGULATIONS, 1910.

ARTICLE V.

	1922	1923	1924	1925	1926	1927
Houses completely inspected for various causes	430	664	553	653	906	839
Reports made under Housing Acts, 1909 and 1919	85	45	28	16	14	0
Notices served under the said Housing Acts	82	41	33	15	4	0
Houses reported under Section 11 of 1925 Act for closing	1	1	0	6	7	6
Houses considered to be in a state so dangerous or injurious to health as to be unfit for human habitation	1	1	0	6	7	6
Closing Orders made by Local Authority ..	1	0	0	6	7	6
Dwelling-houses closed after Closing Orders	0	0	0	3	7	4
Houses reported under Section 15 and Section 28 for repairs necessary to put such houses into a fit state for human habitation	84	45	28	16	14	0
Notices served under Sections 15 and 28..	81	41	33	15	4	0
Orders under Sections 15 and 28 complied with by Owners	61	28	15	5	10	0
Orders carried out by Local Authority under the powers of the Act	0	0	0	0	0	0
Orders not complied with under Section 17	1	1	0	0	0	0
Orders not complied with under Section 15 and Section 28	1	17	13	10	4	0
New Houses Erected and Certified	72	70	309	630	730	504
Houses closed on Owners' initiative	5	0	0	0	0	0

Most of the work during the year has been carried out under The Public Health Acts.

SHOPS INSPECTION.

Much of the Inspectors' time is occupied in patrolling, and in the greater part of this no entrance that can be included in the count of visits set out in the Table below is involved. The Table includes evening visits.

Total Visits	2,015
Breaches of Shops' Acts Discovered :—	
Trading during prohibited hours	8
Assistants not getting full time for meals	—
Assistants not getting Weekly Half-holiday	—
No Notice in Shop *re* Weekly Half-holiday	50
No Notice in Shop *re* Closing Day	53
Shop Seats—Absence of	—
No Notice in Shop *re* Mixed Business	37

Action taken as to offences :—

Warned verbally	147
Warned by letter	1
Reported to Local Authority	—
Prosecutions	—
Night Patrol—Hours	54

THE REMOVAL OF HOUSEHOLD REFUSE.

	1923	1924	1925	1926	1927
Estimated Amount of Refuse removed from Borough .... Loads	13,845	13,952	14,128	13,731	13,588
Number of Ashpits replaced by Ash-bins during the year	783	91	42	141	55

It should be noted that a " load " now signifies a much heavier weight than formerly, owing to the carrying capacity of the wagons having been increased.

RATS AND MICE (DESTRUCTION) ACT, 1919.

1922	Notices served	10
1923	,, ,,	39
1924	,, ,,	Nil
1925	,, ,,	4
1926	,, ,,	5
1927	,, ,,	2

We have no difficulty in getting any measures we suggest taken. In fact the occupiers of premises show as much anxiety to get rid of the rodents as we do.

NATIONAL RAT WEEK 1927.

The Corporation co-operated with the owners and occupiers of most of the large business premises in the Central area of the town, in a rat campaign during the months of October, November and December.

Messrs Evans Son Lescher & Webb of Liverpool undertook the treatment of the whole area with Liverpool Virus in special bait form, each bait being wrapped in a skin which eliminated the necessity of handling.

The baits were laid by their own men. Three separate dressings were applied at intervals of three weeks.

Good results appear to have been attained.

Advice and prescriptions are given to the public when requested.

Maternity and Child Welfare.

The Health Committee has adopted the scale of fees for doctors called by a Midwife in emergency under the Midwives' Act where the family is unable to pay.

There are five Welfare Centres: at Hampton Road, High Park, Liverpool Road, Crossens, and Hoghton Street. There is a Central Voluntary Committee with a separate Sub-Committee for each Centre. The Health Visitors attend on all occasions.

The Health Committee have arranged a system of co-ordination with St. Katherine's Home and the Southport and Birkdale Day Nursery.

In virtue of this arrangement the Corporation were to pay the Institutions, as a subsidy, 25 per cent. of their net expenditure for each financial year; the net expenditure being reckoned as their gross approved expenditure less their earned income. This is in addition to a 50 per cent. grant paid by the Ministry of Health. The amount of this grant is subject to modification in the ensuing financial year.

The following Table gives the causes for which the Midwives required medical assistance during the year :—

Mother	Fits	1
	Ruptured perineum	36
	Uterine inertia	8
	Abnormal presentation	1
	Excessive sickness	2
	Pyrexia	3
	Hæmorrhage	2
	Adherent Placenta	4
	Breech presentation	2
	Puffiness of hands and face	4
	Threatened abortion	2
	Not definitely specified	9
	Obstructed labour	1
	Bronchitis	5
	Anæmia	2
	Twins	2
		84
Child	Rash	1
	Cyanosed	1
	Sore eyes	4
	Jaundice	1
	Stillbirth	1
		8

MIDWIVES' ACTS, 1902 & 1928.

The number of Midwives in practice at the end of the year was 16, 13 of whom hold the Certificate of the Central Midwives Board. They are visited regularly by the Inspector of Midwives about once a quarter when their Registers, Midwives' Bag, and Appliances are examined. During the year 722 Births were notified to the Local Supervising Authority by the Midwives, medical help being obtained for 92 cases.

Stillbirths (Corrected)	49	
Number notified by Medical Practitioners	12	
,, ,, Midwives	39	
Number of Births notified by Medical Practitioners		318
,, ,, ,, Midwives		722
Number of Births notified (corrected)		1,008

INFANTILE CARE.

Births notified to M.O.H. : Legitimate		945
,, ,, ,, Illegitimate		63
Births not notified		9
,, ,, (1926)		14
Infants visited at home		887
,, stillborn	42	
,, who died within 24 hours of birth	9	
,, breast fed	667	
,, partly breast fed	38	
,, artificially fed	115	
,, removed	16	
Ante-natal cases : 1st visits		163
Re-visits		328
Post-natal cases : 1st visits		878
Re-visits		3,295
Infants : 1st visits		876
Re-visits		3,335
Children seen at home—1 to 5 years		4,634
Infants seen at home—Sore eyes		30

Deaths of infants under 1 year of age :—

Breast fed	17
Artificially fed	20
Died under 24 hours	9
Too good to visit	5
	51

MATERNITY WARD, CURZON ROAD, SOUTHPORT.

21 BEDS.

(1) Number of cases in the Home on January 1st, 1927..............	6
(2) Number of cases admitted during 1927	283
(3) Average duration of stay	14 days.
(4) No. of cases notified as : (*a*) Puerperal fever .... (*b*) Puerperal pyrexia (i.e. rise of temperature to 100·4°F. for 24 hours or its recurrence within that period); with the result of treatment in each case.	 None. 11 Result of treatment in each case good.
(5) No. of cases of Pemphigus Neonatorum	None.
(6) No. of cases notified as Ophthalmia Neonatorum with result of treatment in each case	None.
(7) No. of infants not entirely breastfed while in the Institution with reasons why they were not breastfed.	9 4 Illegitimate babies being adopted* 2 Depressed nipples. 1 Death of mother. 2 Mastitis.
(8) No. of Maternal deaths with causes.	1. (Emergency Primipara). Head not engaged when admitted. Caesarian Section, large Fibroid found on Uterus and Hysterectomy performed. Patient collapsed and died 10 hours later.
(9) No. of fœtal deaths : (*a*) stillborn, and (*b*) within ten days of birth and their causes—and the results of the post mortem examination if obtainable	(*a*) 19 1 Eclampsia of mother. 4 Albuminuria of mother. 5 Anti-partum Hæmorrhage. 1 History of fall (mother) 6 weeks previous to confinement. 2 Prolapsed Cord. 1 Imperforate Anus. 3 Asphyxia Pallida. 1 Transverse position. 1 Breech (premature). (*b*) 3 1 Premature birth (one of twins). 1 Premature (Albuminuria—mother). 1 Prematurity and convulsions (Albuminuria—mother).

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* These are cases of mothers whose infants are to be adopted by satisfactory persons. Under these conditions, and as breast feeding must cease in any case when the infant leaves the ward, it is the custom to have artificial feeding established satisfactorily as early as possible.

The results at the Maternity Hospital during the year have been very encouraging.

They are obtained largely by the efforts of an interested and loyal staff who are kind to their patients and zealous in their work. An excellent standard is aimed at and attained.

The patients realise the great advantages of the ante-natal clinic.

The Attendances numbered about 1,250 and the results have been of great value.

(Signed) A. S. GARDEN.

WELFARE CENTRES.

Dr. Rye has remained the Honorary Medical Officer at the Hampton Road and Liverpool Road Centres.

The total attendances show an increase over the previous year of 2,682.

We note a tendency, on the part of the people who most require the advantages of the centres, to fail to attend, and this is not easy to remedy.

Name of Centre.	ATTENDANCES.							TREATED.			
	Nursing Mothers.		Expectant Mothers.		Infants.		Children over 1 and under 5.	Nursing Mothers.	Expect-ant Mothers.	Infants.	Children over 1 and under 5.
	1st visits.	Re-visits.	1st visits.	Re-visits.	1st visits.	Re-visits.					
Hampton Road ...	103	1833	11	42	124	1403	790	121	23	1521	790
High Park............	154	2626	25	73	154	1972	971	479	78	2124	971
Liverpool Road ...	140	2559	10	38	137	1774	1610	166	51	1911	1599
Crossens	56	1123	6	31	58	668	823	247	33	722	823
Hoghton Street ...	176	2175	18	62	171	1722	724	523	30	1893	740
Totals	629	10316	70	246	644	7539	4934	1536	216	8171	4923

ATTENDANCES.

	Nursing Mothers.		Expectant Mothers.		Infants.		Children over 1 and under 5 years.
	1st visit.	Re-visit.	1st visit.	Re-visit.	1st visit.	Re-visit.	
1923...	358	6703	31	65	363	4610	2934
1924...	384	6617	35	95	384	4407	2876
1925...	479	8416	58	191	472	5651	3607
1926...	586	9511	60	248	599	6742	4150
1927...	629	10316	70	246	644	7539	4934

1927 ... Total attendances 24,387

ST. KATHERINE'S HOME, 5, LATHOM ROAD.

Total number of admissions during 1927 :—

Maternity Cases	20
Rescue Cases	8
Night Cases	33
Preventive	—
	61

Total number of discharges during 1927 :—

Maternity Cases	15
Rescue Cases to Mental Homes	None
Rescue Cases to other Homes	6
Rescue Cases to Domestic Service	2
Night Cases	33
To the Union	1
To V.D. Ward	1
	58

Average length of time kept in Home	24 weeks.
Visits paid by former Inmates	960

Number of Babies in St. Katherine's Home in 1927 :—

Babies admitted to Home	5
Babies born in Home	16
	21

Number Discharged from Home during 1927 :—

Discharged with the Mothers	6
To Foster-mothers	5
To another Home	2
To V.D. Ward	—
To The Union	—
	13

A Register is kept distinguishing Residence Days, as between Maternity and Rescue cases ; grant is payable only with respect to the former. The Committee of the Home are endeavouring to provide Foster-mothers for the Infants who would have been received at the Southport Babies' Home had this Institution not been closed. The Ministry of Health are being asked for a grant in aid of this scheme.

It would be well if the Infants could be taken out more during the Winter. This point is constant at every kind of Babies' Home.

SOUTHPORT AND BIRKDALE DAY NURSERY, DUKE STREET.

Individual Children admitted....................	113
Attendance (days)..............................	2,913

During the past year nineteen children were medically inspected ; but the examinations disclosed nothing outstanding,

OPHTHALMIA NEONATORUM.

Cases.			Vision unimpaired.	Vision impaired.	Total Blindness.	Deaths.
Notified.	Treated.					
	At Home.	In Hospital.				
7	4	3	6	Nil.	Nil.	1*

N.B.—All out-door Midwives are instructed to use Silver Nitrate 1% ( ) immediately after birth.

* Cause of death :—1A Acute Cardiac Dilatation.
1B Acute Gastric Dilatation.
1C Sudden attack of Vomiting.
2 Ophthalmia Neonatorum.

SUPPLEMENTARY HEALTH VISITING.

Special Enquiries—Medical Officer of Health......	233
Incidental Calls................................	498
Visits to Infectious Diseases....................	32
Visits to houses found closed....................	1,037
Visits to Midwives............................	45

(See also Report of School Medical Officer.)

GENERAL ARRANGEMENTS MADE FOR ATTENDING TO THE HEALTH OF EXPECTANT AND NURSING MOTHERS AND OF CHILDREN UNDER FIVE YEARS OF AGE.

The Notification of Births Act, 1907 (adopted by the Local Authority 1908), requires all Medical Practitioners and Midwives to notify the Medical Officer of Health within 36 hours after the birth has taken place.

This Act is invaluable, as visits can be paid to infants directly after birth if necessary ; but usually they are not made until after the tenth day, so as not to encroach upon the Midwife's province. This works very well, and the District Midwives afford assistance in sending mothers to the Centres.

When the Health Visitor calls, not only is advice given *re* the Infant, but all children in the house are seen, and a friendly word given. The general cleanliness of the home, sobriety and occupation of the parents and causes of deaths of other children are noted—the last often indicating the advice needed.

The Welfare Centres, five in number, are held in the most populous parts of Southport.

Hampton Road Mission Hall on Thursday at 2.30 p.m. (Opened 1914).
92, Poulton Road, High Park, on Wednesday at 2.30. (Opened 1918).
Wesleyan Schools, Liverpool Road, on Tuesday at 2.30. (Opened 1919).
Rufford Road, Crossens, on Wednesday at 2.30. (Opened 1921.)
Baptist Schools, Hoghton Street, on Tuesday at 2.30. (Opened on December 7th 1926).

All mothers with babies and expectant mothers are heartily welcomed. Tea and biscuits are provided for which a charge of 1d. is made, and biscuits and milk for the children 2d.

Much good and valuable work is being done at the Centres. The voluntary workers undertake all duties except treatment, which is done by the Health Visitors. Children suffering from defective vision, external eye disease, skin trouble, marasmus, rickets, etc., or any other complaint are referred to a Private Doctor, or, if unable to pay, are sent to an appropriate clinic.

There has been a decided increase in the number and regularity of the attendances, which indicates that the mothers appreciate the benefits derived by their children and themselves. Two sewing classes are held weekly at Hampton Road and High Park, and are satisfactorily attended. At these classes voluntary helpers look after the children while the mothers devote their time to dressmaking and knitting.

The principal aims of these Centres are the supervision of the health of the mother during the ante-natal and post-natal periods, and education in hygiene and mothercraft. At every session a qualified Medical Practitioner is in attendance. During the year, 1927, mothers and children under five years of age, made 11,261 and 13,117 attendances respectively at the various Centres.

The Maternity Homes Act came into operation on January 1st, 1927; it is very desirable that such Homes should come under inspection. During the year ten applications were received and eight registered.

The Nursing Homes Registration Act, 1927, will come into operation on July 1st of this year. This Act repeals part II. of the Midwives and Maternity Homes Act.

Compensation may be made to Midwives under part I, section 2 (I) of the Midwives and Maternity Homes Act 1926 " which provides that where a midwife has been suspended from practice in order to prevent the spread of infection, she shall, if she was not herself in default, be entitled to recover from the Local Sanitary Authority such amount by way of compensation from loss of practice as is reasonable in the circumstances of the case." The basis of compensation should be calculated on the loss of income actually sustained by the midwife, and the payments should not exceed the reasonable amounts paid by her to other Midwives whom she has had to employ to attend such patients confined during her period of suspension.

DENTAL MATERNITY CENTRE, 1927.

Date.	Appointments.	Number Treated.		New Cases.	Extractions.	Anæsthetic.			Fillings.	Root Treatment.	Dressings.	Scalings.	Oral Affections.	Examined.	Impressions Taken.	Bite Taken.	Try In.	Finished Dentures.				Repair.	Re-make.
		1st visits.	Re-visits.			Loc.	N_2O	Gen.										Partial.		Full.			
																		U.	L.	U.	L.		
Jan.......	47	20	17	3	14	14	—	—	2	—	—	—	8	5	18	4	7	—	1	—	1	—	2
Feb.......	58	10	58	4	12	12	—	—	7	—	4	1	13	14	26	4	9	—	3	3	2	2	6
March ...	56	9	45	7	38	23	—	1	—	—	—	1	17	6	11	4	4	1	2	1	1	2	2
April ...	47	2	30	2	12	12	—	—	5	—	2	1	6	4	2	—	2	—	3	—	—	1	1
May......	46	14	35	7	48	21	—	—	4	—	3	—	11	10	10	1	1	—	1	1	1	1	1
June ...	45	5	49	5	42	22	—	1	2	2	—	—	5	11	15	6	9	2	—	—	—	4	1
July......	58	2	47	2	58	10	—	2	—	—	—	2	8	7	12	2	9	1	—	4	5	—	3
August	18	3	14	—	3	3	—	—	—	—	—	2	3	2	8	3	1	—	—	—	—	1	1
Sept. ...	40	14	40	8	23	9	—	1	5	—	4	1	6	7	21	2	9	2	2	2	1	2	4
Oct.......	54	6	47	3	57	22	—	2	4	1	2	—	6	15	7	2	6	—	—	4	4	5	1
Nov. ...	44	4	33	4	9	9	—	—	6	—	—	—	11	4	6	2	1	2	1	—	—	3	1
Dec.......	23	3	27	—	2	2	—	—	—	—	—	—	12	4	10	2	6	—	1	—	—	5	—
Totals ...	536	92	442	45	318	159	—	7	35	3	15	8	106	89	146	32	64	8	14	15	15	26	23

SUMMARY OF VARIOUS CLINICS.

Days and Times of Attendances.

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Infant Welfare Centres—						
Liverpool Road............		1 45				
High Park			1-45			
Crossens			2 p.m.			
Hampton Road............				1-45		
Hoghton Street		2-30				
Sewing Classes—						
Hampton Road............	2-30					
High Park				2-30		
Ante-Natal Clinic—						
Southport Infirmary......					11–1	
School Clinic, 2, Church St.						
Minor Ailment Clinic ...	2-30					
Dispensary		2 p.m.				
Vision Clinic			3-30		2 p.m.	
Skin Clinic				2-30		
Tonsil & Adenoid Clinic				9-30 (when necessary)		
Sunlight Treatment Clinic	9-30		9-30		9-30	
Treatment Clinic	9-30	9-30	9-30	9-30	9-30	9-30
Dental Clinic	9-30 2 p.m.	9-30	9-30 2 p.m.	9-30 2 p.m.	9-30	
Dental Maternity Clinic ...		2 p.m.			2 p.m.	
Venereal Diseases—						
Southport Infirmary—						
Clinic—Men	5-30			5-30		
,, Women		1–3				
Treatment Clinic—Men	8-30–10 a.m.	8-30–10 a.m.	8-30–10 a.m.	8-30–10 a.m.	8-30–10 a.m.	8-30–10 a.m.
,, ,,	6–8 p.m.	6–8 p.m.	6–8 p.m.	6–8 p.m.	6–8 p.m.	6–8 p.m.
,, Women	10–12 a.m.	10–12 a.m.	10–12 a.m.	10–12 a.m.	10–12 a.m.	10–12 a.m.
,, ,,	2–4 p.m.	2–4 p.m.	2–4 p.m.	2–4 p.m.	2–4 p.m.	2–4 p.m.

Southport Blind Welfare.

Arrangements previously made with the Manchester and Salford Blind Aid Society have been continued during the year.

Removed from the Register 5

3 Males deceased—age 80, 64 and 2.

1 Female deceased—age 77.

1 Female transferred to The Elms Home, Pendleton.

Added to the Register 12

On the Register :—

	Under 15.	16–21.	22–49.	50–69.	70 and over.	Total.
Males	8	1	8	22	14	53
Females	6	1	12	21	13	53
Children in " Sunshine House "						31
Total						137

In receipt of Old Age Pension 55

(5 of whom are also in receipt of the Contributory Pension).

850 visits paid by the Home Teacher to persons in their own homes ; instruction is given at the time.

2 Classes have been held weekly for Instruction.

4 Home Workers are attached to the Home Workers' Scheme.

Resident in the Blind Schools 7

School for the Blind, Wavertree, Liverpool	5
Catholic Blind Asylum, Brunswick Road	1
Royal Normal College	1

In December, a blind boy, Harry Butler, was successful in gaining a Gardeners' Trust Scholarship, value £40 per annum, tenable for three years, and the Education Authority are assisting him to continue education at the Royal Normal College.

Grants to the amount of £460 have been distributed. The weekly grants enable the recipients to provide sufficient food, etc., but in some cases have been found to be inadequate when sickness occurs, and temporary increases in the Grants have been made. Grants have also been given for hospital treatment, clothing, and other special purposes.

Augmentation to Home Workers, £65 1s.

Each Tuesday and Wednesday afternoon classes are held in a schoolroom in Portland Street with an average attendance of 9. Instruction has been given by Miss Mace and the Home Teacher in Typewriting, embossed reading and writing, Braille music, cane and raffia basketry, chair-seating, and coal-bag making. 4 persons are disposing of their work with profit.

In the Education of the Blind it must be remembered that this does not cease at age 14 to 16, or anything of that kind as in the case of school children. The Education to be effective must be continued until trade suitable to the condition of the Blind person has been really learnt, to enable him to be self supporting.

Mr. Woodeson, of the Committee, has kindly lent the Society a typewriter; and one blind person has already purchased a typewriter as a result of the instruction received.

The Home Workers continue to give satisfaction and the earnings of three of them have improved. Earnings are improving owing to the Home Teacher securing orders, and it is hoped that, with better accommodation and further advertising, all the Home Workers will be kept fully occupied. The Committee have been considering the provision of more adequate accommodation.

The Ministry of Health are anxious that opportunities should be given for the blind to meet at Social gatherings, where short addresses could be given, the news of the day discussed, and music provided. In many cases these " Socials " are the only form of recreation that the blind have; it has been found that they provide an inducement for the blind people to leave their homes, which otherwise some of them rarely do. The Committee has sanctioned the opening of such a Centre, and " Socials " are held fortnightly in the schoolroom in Portland Street. A letter from the Minister of Health expressed appreciation of these developments. The Minister also notes with interest the regular and competent assistance rendered by honorary helpers, and he trusts that this valuable service will be encouraged and extended.

WIRELESS INSTALLATION.

Owing to the initiative of the Southport Branch of Toc H. and negotiations with the Manchester " Wireless for the Blind " Fund; 13 sets have been installed in the homes of approved cases, and it is hoped shortly to install several more.

It is regrettable that certain blind persons, street musicians and others, play upon the sympathies of the public. These persons find an easy way of making a living. Some of them have been trained in Blind Institutions but refuse to spend any of their time, even in winter and bad weather, in making goods that might have a ready sale. Our work is sometimes hindered by such people, but such cases are exceptional.

Thanks are due to the Advertising and Band Committee for the issue of free seating in the Municipal Gardens during the season; Southport Branch of Toc H; Southbank Road Wesleyan Church; Girl Guides; and Girls' Friendly Society.

Supervision of Food Supplies.

VISITS TO :—

Public Slaughter-houses	397
Private Slaughter-houses	251
Butchers' Shops	1,837
Fish and Poultry Shops	2,136
Other Shops	6,902
Restaurant or Hotel Kitchens (workplaces)	36
Ice-cream Workshops	21
Ice-cream Stalls	44
Potted Meat and Fish Works	140
Piggeries	401
Cowsheds	174
Milk Farms outside the Borough	10
Bacteriological Examination of Milk	100
Private Premises where Pigs are killed	362
	12,811

UNSOUND FOOD DESTROYED.

Under Magistrate's Order :—

Nil.

By Consent of Owner or Consignee :—

Beasts' Carcases and all Organs	41
Beasts' Livers	69
Beasts' Lungs (sets)	125
Beef (lbs.)	68
Beasts' Hearts	3
Beasts' Head	1
Pigs' Livers	81

Pigs' Carcases and all Organs	20
Pigs' Lungs (sets)	111
Bacon (lbs.)	19
Haddock (lbs.)	10
Pork (lbs.)	69
Sheeps' Carcases and all Organs	5
Rabbits	45
Lambs' Carcases and all Organs	5
Picked Shrimps (quarts)	56
Veal (lbs.)	34
Beasts' Stomachs	6
Mackerel (lbs.)	3
Crayfish (lbs.)	13
Sweetbreads (lbs.)	7
Beasts' Intestines	2
Beasts' Udders	1
Cheese (lbs.)	22
Pigs' Heads	2
Mutton (lbs.)	18
Beasts' Mesenteric Fat	47
Lamb (lbs.)	14
Sheeps' Lungs (Sets)	1
Sheeps' Heart	1
Sheep's Liver	1
Beasts' Spleens	10
Beasts' Skirts	40
Pigs' Hearts	41
Finnon Haddock (lbs.)	24

FOODS AND DRUGS ACTS.

SUMMARY OF SAMPLES SUBMITTED FOR ANALYSIS.

Informal Samples				Nature of Sample.	Formal Samples					
		Adulterated					Adulterated			
Number Taken	Number Genuine	Materially	Trivially or doubtful		Number Taken	Number Genuine	Materially	Trivially or doubtful	Vendors Cautioned	Prosecutions
—	—	—	—	Milk	81	73	2	6	8	—
2	2	—	—	Black Currant Jam	1	1	—	—	—	—
1	1	—	—	Black Pepper	—	—	—	—	—	—
2	2	—	—	Epsom Salts	—	—	—	—	—	—
2	2	—	—	Cream of Tartar	—	—	—	—	—	—
4	4	—	—	Raspberry Jam	—	—	—	—	—	—
2	2	—	—	Coffee	—	—	—	—	—	—
4	4	—	—	Sponge Cake	—	—	—	—	—	—
1	1	—	—	Calcined Magnesia	—	—	—	—	—	—
2	2	—	—	Seidlitz Powder	—	—	—	—	—	—
3	3	—	—	Strawberry Jam	1	1	—	—	—	—
1	1	—	—	Butter	18	18	—	—	—	—
2	2	—	—	Pork Sausage	7	6	—	1	1	—
—	—	—	—	Butter with Margarine	1	1	—	—	—	—
2	2	—	—	Lard	4	4	—	—	—	—
2	2	—	—	Marmalade	1	1	—	—	—	—
1	1	—	—	Stilton Cheese	—	—	—	—	—	—
2	2	—	—	Honey	—	—	—	—	—	—
2	2	—	—	Damson Jam	3	3	—	—	—	—
—	—	—	—	Beef Sausage	3	3	—	—	—	—
—	—	—	—	Brawn	1	1	—	—	—	—
—	—	—	—	Shrimps	1	1	—	—	—	—
—	—	—	—	Suet	1	1	—	—	—	—
—	—	—	—	Picked Shrimps	1	1	—	—	—	—
1	1	—	—	Raspberry Vinegar	—	—	—	—	—	—
2	1	—	1	Lime Juice Cordial	—	—	—	—	—	—
—	—	—	—	Cheese	5	5	—	—	—	—
1	1	—	—	Liquorice Powder	—	—	—	—	—	—
2	2	—	—	Cocoa	—	—	—	—	—	—
2	2	—	—	Cod Liver Oil	—	—	—	—	—	—
2	2	—	—	Camphorated Oil	—	—	—	—	—	—
1	1	—	—	Calves Foot Jelly	—	—	—	—	—	—
1	1	—	—	Olive Oil	—	—	—	—	—	—
3	3	—	—	Lemon Cheese	—	—	—	—	—	—
1	1	—	—	Salt	—	—	—	—	—	—
2	2	—	—	Canned Peas	—	—	—	—	—	—
1	1	—	—	Potted Shrimps	—	—	—	—	—	—
1	1	—	—	Potted Beef	—	—	—	—	—	—
1	1	—	—	Margarine	—	—	—	—	—	—
2	2	—	—	Tinned Cream	—	—	—	—	—	—
1	1	—	—	,, Tomatoes	—	—	—	—	—	—
1	1	—	—	,, Loganberries	—	—	—	—	—	—
1	1	—	—	Evaporated Milk	—	—	—	—	—	—
1	1	—	—	Syrup of Senna	—	—	—	—	—	—
1	1	—	—	Grape Fruit Marmalade	—	—	—	—	—	—
1	1	—	—	Ground Almonds	—	—	—	—	—	—
2	2	—	—	Custard Powder	—	—	—	—	—	—
1	1	—	—	Mince Meat	1	1	—	—	—	—
1	1	—	—	Gooseberry Jam	—	—	—	—	—	—
1	1	—	—	Cascara Sagrada	—	—	—	—	—	—
1	1	—	—	Malt & Cod Liver Oil	—	—	—	—	—	—
70	69	—	1		130	121	2	7	9	—

PARTICULARS OF SAMPLES REPORTED TO BE NOT GENUINE.

Pork Sausage.—One Formal Sample contained a small quantity of Boric Acid. The Vendor was cautioned by the Medical Officer of Health.

Lime Juice Cordial.—One Informal Sample contained a small quantity of Salicylic Acid. Further Sample to be taken.

Milk.—Eight Formal samples were reported against. Three were slightly deficient in Fat ; and five contained added water in varying amounts, the greatest amount being 10%. This sample was taken from a Local Vendor with a good record, and being satisfied that it had not been tampered with, arrangements were made with the County Authorities to take further samples at the Source of supply. Four other samples were accordingly taken ; three from separate Kits, and one from a mixing of all three Kits, and forwarded for analysis. The Analyst certified two contained 3% of added water, one 2% and the fourth was genuine. The Farmer was cautioned. The standard laid down by the Board of Agriculture is that milk should not contain less than 3 per cent of Fat, nor less than 8·5 per cent of Milk solids other than Milk fat ; this standard is low, yet under the present state of the law it appears to be almost useless to take proceedings against Vendors selling milk which is as much as 10% deficient in Fat or which contains 10% of added water.

TAMPERING WITH MILK.

Milk may be sophisticated by abstracting some of the cream, or by adding water ; or by both methods. Any child knows that ! One is anxious to learn what gets the milk from which some of the cream has been removed. Apart from the addition of colouring matter or preservatives (also an offence), I doubt if there is much else to be said.

" Watering of the Cow " instead of " watering of the milk " has been heard of ; but a cow ought to be supplied with all the water it cares to take, and it possesses a most adequate piece of physiological apparatus which automatically and rapidly removes excess of water from the blood, the solution concentration of which remains remarkably constant. Probably no excess of water reaches the milk physiologically. Similar considerations apply to the effects of the use of green or root foods containing much water. The composition of the physiological fluids is remarkably constant. It is the capacity of the organism to maintain such a constancy, in spite of the changes in its environment, that enables it to survive. Yet when a milk sample is " wrong " any tale is told without one word of universal experience or of expert evidence being adduced to support it. It was " the hot season or the " cold, the wet or the dry, the grass or the shortage of it, the turnips or the " cake, the cows had been turned out, or brought in," or any old thing ! Any or all may be true, but no causal nexus is proved. Now for the Law !

SALE OF MILK REGULATIONS, 1901.—1. "Where a sample of milk (not being milk sold as skimmed, or separated, or condensed, milk) contains less than 3% of milk fat, it shall be presumed for the purposes of the Sale of Food and Drugs Acts, 1875 to 1899, until the contrary is proved, that the milk is not genuine, by reason of the abstraction therefrom of milk fat, or the addition thereto of water."

2. "Where a sample of milk (not being milk sold as skimmed, or separated, or condensed, milk) contains less than 8·5% of milk solids other than milk fat, it shall be presumed for the purposes of the Sale of Food and Drugs Acts, 1875 to 1899, until the contrary is proved, that the milk is not genuine by reason of the abstraction therefrom of milk solids other than milk fat, or the addition thereto of water."

THE SALE OF FOOD AND DRUGS ACT, 1875.—Section 9. "No person shall, with the intent that the same may be sold in its altered state without notice, abstract from an article of food any part of it so as to affect injuriously its quality, substance, or nature, and no person shall sell any article so altered without making disclosure of the alteration, under a penalty in each case not exceeding £20."

"This section applies to the abstraction of an important ingredient of any commodity; but it was specially intended to make the removal of cream from milk a punishable offence. Unlike s. 6, ante, it applies to the person who actually alters the article, as well as to the person who sells it when altered. It should further be noticed that s. 8 does not apply to this section and that therefore the giving of a label is no defence to a prosecution under it, unless the label sufficiently discloses the nature of the alteration, and unless the purchaser's attention is called to it at the time of the sale."

In prosecutions under these ordinances the defendant is entitled to bring evidence to rebut the presumption that a milk sample showing a deficiency in fat or milk solids is not genuine milk, and to prove that it has not been tampered with in any way. There is a marked tendency at present on the part of many Courts of Justice to regard the regulations as having set forth a formula which must not be taken too seriously lest injustice be done. It would seem that many benches throughout the country are prepared to dismiss a case on production of the flimsiest evidence for the defence. In some instances it has been sufficient in the absence of direct evidence to the contrary, for the defendant to make the statement that to his knowledge, the milk when sampled was in the same state as at the time of milking; and the case is dismissed. The Board of Agriculture's modest minimum content formula of 3·0% milk fat and 8·5% milk solids non-fat is accordingly relegated to a position of little value. (The defence of Warranty is a thing apart and proof of warranty is sufficient).

The circular letter of the Board of Agriculture which closely followed the issue of the Sale of Milk Regulations, 1901, states that "in the regulations the limits below which a presumption is raised that the milk is not genuine were necessarily fixed at figures lower than those which are usually afforded by genuine milk in which the proportion of milk fat and non-fatty solids very frequently exceeds the percentages specified above."

This letter goes on to say that in certain seasons of the year there *may* be cases in which a sample of genuine milk may fall below these limits and it suggested, in order to deal fairly with such cases, that in the absence of any special circumstances indicating that the case is a fraudulent one, the Local Authority might, in the first instance, call the vendor's attention to the Analyst's report and ask for an explanation before determining the propriety of bringing proceedings. This letter necessarily weakens the effect of the regulations.

It is our opinion that genuine milk, provided that proper feeding and complete milking are carried out, (a duty which should be required of every cow-keeper), need never have a milk fat content of less than 3% ; in fact the minimum content should be nearer 3·5%.

In order to assure ourselves on these lines, all the local findings on analysis of milk for the last eleven years have been reviewed and the annexed charts show the average content of milk fat and solids non-fat in 934 samples grouped in the respective 52 weeks of the year. The average percentage of milk fat in the 934 samples was 3·61, and of solids non-fat 8·9 ; at no time during these years did the weekly average fall below 3·24 which figure represents the average of 15 samples taken during the 25th week of the year (i.e. in the middle of June), three of which showed fat deficiency of 36%, 7%, and 8%, representing contents of 1·92%, 2·79% and 2·76% respectively. In the first of these three cases a fine of £5 was imposed, and cautionary letters were sent to the other two. If these three samples are excluded an average of 3·43% is obtained for that particular week.

The variations above and below the average for the eleven years are fairly constant throughout the year and show no definite seasonal incidence, save that during the latter half of the year a slight improvement in the fat percentage is noticeable ; no doubt due to the more natural and healthy condition of the animals which from May onwards are mostly out on the pasture. The average content for the first 26 weeks was 3·55% milk fat and 8·90% solids non-fat ; the second 3·67% milk fat and 8·93% solids non-fat. In no week does the average fat content fall to the minimum of 3%. The four weeks during which the average fat content is 3·3% or lower are 1st, 12th, 25th and 41st, so that seasonal or weather influences appear to have been without effect. The average percentage of milk solids other than fat falls below 8·7% in five weeks, the viz., 2nd, 3rd, 13th, 34th, and 48th weeks. This apparently has no relation to the fat percentage which is reasonably high for the same weeks—viz., 3·44%, 3·52%, 3·42%, 3·49% and 4·2% respectively.

The minimum percentage of fat in any sample was 1·29 and the amount of solids occurred in the same sample 4·42 showing 48% added water. The maximums noted were 7·50% fat and 9·61% solids non-fat in different samples. It is our belief that season can never have the effect of reducing the food constituents of the milk below the Board of Agriculture standards ; but we can understand it to be the case that insufficient feeding, especially during those months when the cows are kept close in the shippon, may have this effect if prolonged.

Ill health of the cow, such as mastitis, may greatly influence the yield and quality, but such a milk is pathological and should not be used.

The following charts show the results of the analyses of 934 samples taken during the last eleven years and divided according to the respective weeks of the year in which they were taken.

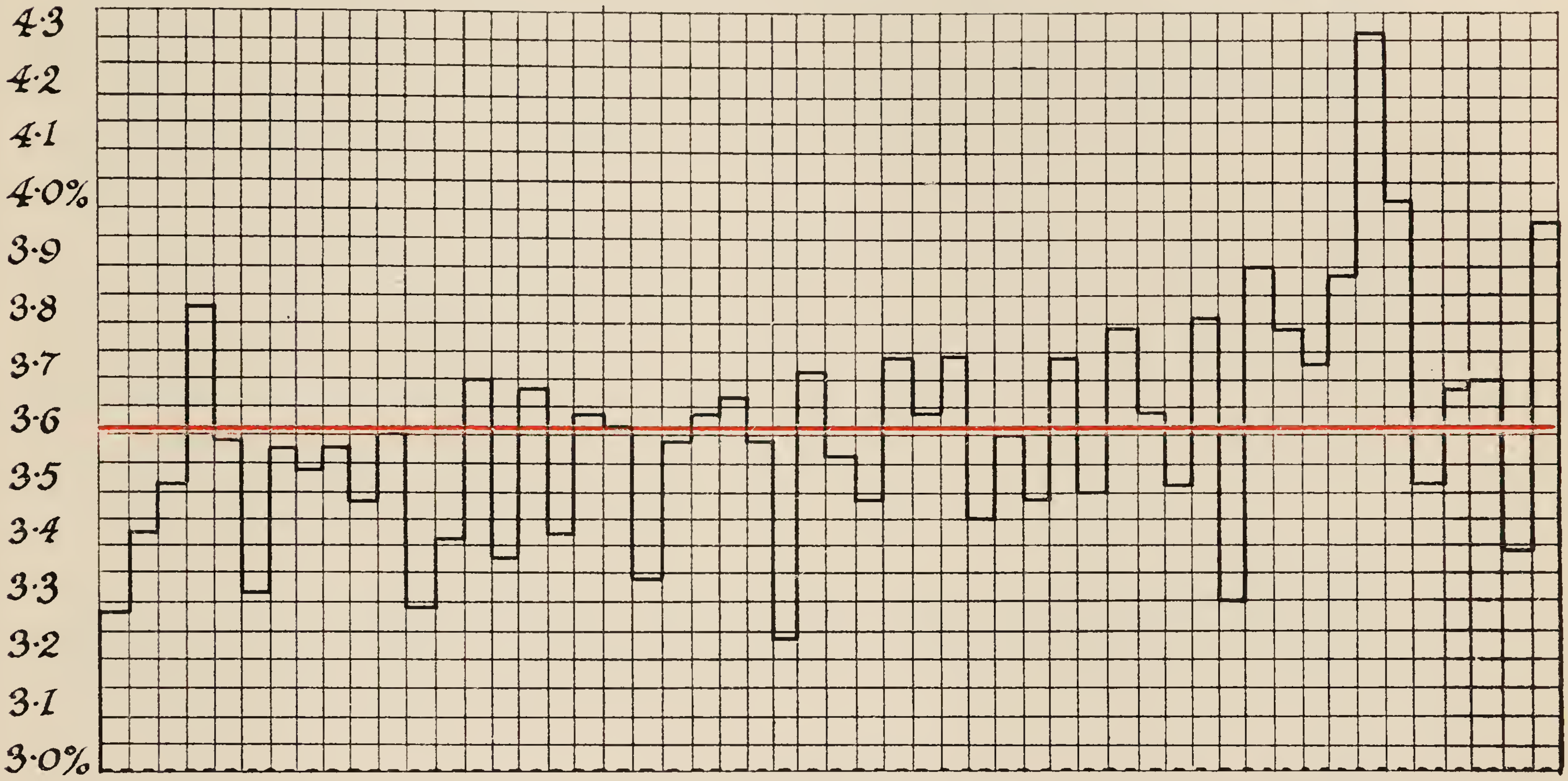
Chart 1 indicates the average percentage of fat of the samples taken in each of these weeks.

Chart 2 shows the average percentage of "solids non-fat" of the samples taken in each such week.

Chart 3 shows the incidence of cases in which the milk was found not to be genuine, arranged as they occur in the different weeks.

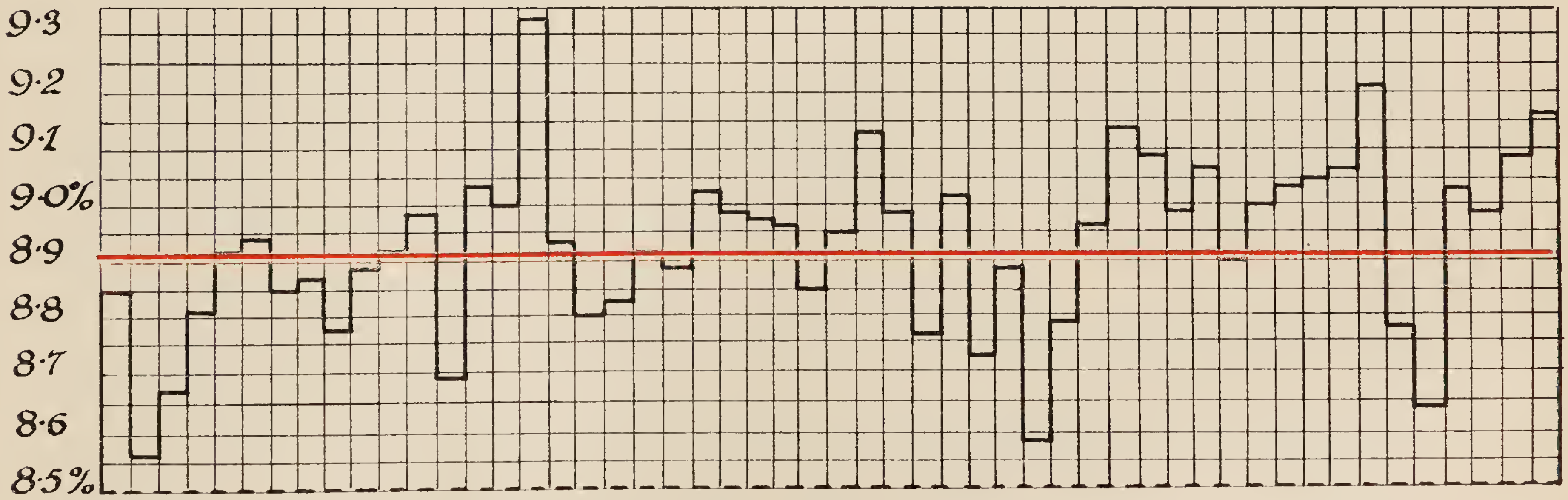
Weekly Average Percentage of **MILK FAT.**

1.



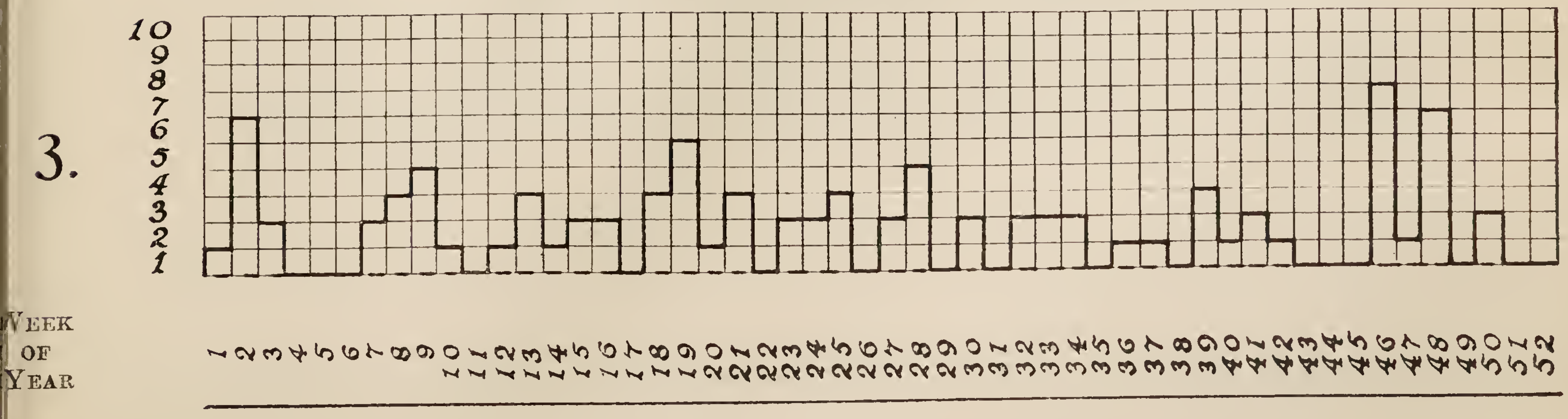
Weekly Average Percentage of **MILK SOLIDS NON FAT.**

2.



Numbers of Milk Samples regarded as not genuine and their Weekly incidence.

3.



Complete milking, that is milking continued till the udder is dry, taking the whole of the milk and leaving none, has an immense effect on the percentage of fat in the pail and it is a duty of the producer towards his customer to see that such milking is carried out thoroughly every time.

The milk from one particular cow may be below the standard owing to some unnoticed pathological condition, but it should be remembered by those who are administering the law that, whereas the average yield is 3·6% or higher, the milk sampled, unless it be a special sample for the determination of Tuberculosis or other disease, (in which case it would not usually be examined for chemical content), is a mixture from the milk of a number of cows, and that the average should still be above the low minimum of 3%.

The unsupported statement of a milk producer that his milk has not been tampered with does not appear to us to be sufficient to rebut a presumption based on analysis that the milk is not genuine ; and more definite reasons ought to be demanded to warrant the upsetting of the presumption. In fact it is difficult for us to imagine any convincing defence if the milk sample is obtained from a vessel of mixed milk from a herd. If it is from one or two cows a milk deficient in fat should demand an immediate inspection by the Veterinary Officer to determine the nature of the illness.

Better hygienic conditions in the shippons, and regular complete and clean milking, may entail some further small outlay ; but this will be more than repaid by improved physical condition, reduced incidence of disease, and increased yield of higher quality.

It has come to the notice of this Department that some bottled milk on the market is frequently deficient in content. It cannot be too widely proclaimed that milk which has had any of its fat abstracted is an adulterated milk, no matter how high the residual fat content may be.

The delivery for sale of milk at the Board of Agriculture's minimum content has been exalted to the level of a fine art. The general public has been led to regard bottled milk as being good milk, but it must be remembered that though the distribution of milk in bottles to the consumers is the only satisfactory and clean method, they are entitled to a milk which is neither diluted nor deprived of any of its milk fat : in fact it should be the whole milk as it left the cow, unsophisticated in any way.

The sound producer welcomes sampling for he finds that his milk is invariably above the standard required.

In certain of the States in America a special Committee considered the natural composition of milk and fixed the minimum content of milk fat at 3·25% and solids non-fat at 8·5%. The Committee believed that such minima would inflict no real hardship on the milk producers, and it will be noticed that their fat minimum is 8% higher than the Board's.

U.S. STANDARD. U.S. Dept. of Agric., Off. of Sec., Circ. 19.—" Standard milk is the fresh, clean, lacteal secretion obtained by the complete milking of one or more perfectly healthy cows, properly fed and kept, excluding that obtained within fifteen days before and ten days after calving, and contains not less than 8·5% of solids not fat, nor less than 3·25% of milk fat."

In respect of the administration of the Sale of Milk Regulations 1901 this department has analysed 934 samples during the last eleven years, and the findings with respect to both composition and cleanliness compare favourably with those of other centres, But much must be done before milk production reaches a stage which will stand criticism by Health Authorities, and it is our hope that Southport producers will lead the way.

Of the 934 samples 84 (approximately 9%) were found to be unsatisfactory ; 42 samples showed fat shortage varying from a slight to a 39% deficiency ; and 42 displayed a deficiency in solids non-fat varying from a trifle to one indicating 48% of added water. Of the 84 cases 16 were fined amounts ranging from 20 shillings to £20. Three cases were dismissed for various reasons, and in 43 cases, more than half, the department sent cautionary letters acquainting the vendor of the composition of the sample. No action was taken in 21 cases, owing to a satisfactory explanation or to the departure from standard being considered too slight to warrant serious attention.

It will be seen therefore that far from interpreting the regulations strictly, much leniency has been shown and it is recognized that more can be done by co-operation with the trade than by threats of prosecution. The desire of this department is that the milk supply should be safeguarded and rendered safe for consumption, an object which is also in the best interest of the trade.

As we have said, the policy of this Department is to insure milk of a high quality and cleanliness. We are anxious to maintain the good feeling which has always been maintained with the members of the trade in this town for whom we hold a high opinion as being whole-hearted in their desire to achieve the best results. We feel that they will be the last to shield anyone who might be responsible for any action or neglect likely to lower their prestige.

New Regulations made under the " Milk and Dairies consolidation Act 1915 " are now in force.

Under these Regulations, Local Authorities are given wider powers than those formerly possessed, to see that Milk is produced and handled in a cleanly manner. A systematic inspection of Cow Sheds and Dairies is being carried out, and no effort will be spared to get producers and Vendors to work up to the higher standard.

Under The Milk (Special Designations) Order 1922 the Local Authority have granted licences to four firms to sell " Certified " Milk, and to one firm to sell " Grade A " (Tuberculin tested) Milk, within the Borough. All the farms at which the milk is produced have been visited during the Year.

MILK AND DAIRIES ORDER, 1926.

MADE UNDER THE MILK AND DAIRIES (CONSOLIDATION) ACT, 1915.

This Order is of far-reachimg importance, and if enforced will mean that considerable improvement in present methods of milk production will be attained.

The Order generally deals with registration, health and inspection of cattle, cleanliness of cowsheds and dairies, the treatment of the milk subsequent to milking, and the cleanliness of the personnel.

All the Articles are now in operation except Articles 27 and 29 which deal with the type and treatment of churns and other receptacles for milk, and which become effective in October, 1928.

In the case of existing cowsheds and dairies, a further period of eighteen months from April 1st, 1928, is allowed before the provision of Articles 12 (1), 13 (1) and 25 can be enforced. These Articles refer to the construction of cowsheds and dairies.

REGISTRATION.

Article 7. A cowshed or dairy cannot be instituted in any building not previously used for that purpose unless the occupier has given one month's notice in writing to the Sanitary Authority. This will apply to extensions of existing cowsheds and dairies, and the inclusion of premises into the dairy or cowshed of buildings already in existence.

HEALTH AND INSPECTION OF CATTLE.

Article 9. A cow-keeper is prohibited from removing a cow from his cowshed for a period of 48 hours subsequent to his receipt of a notice from the Veterinary Inspector that the latter will make inspection of the cattle.

Article 11. Adds the following diseases to those mentioned in Section 5 of the Act :—

(1) Any comatose condition.
(2) Any septic condition of the uterus.
(3) Any infection of the udder or teats likely to convey infection.

It will be remembered that Article 5 of the Act prohibits the sale of Tuberculous Milk or the milk of a cow suffering from Tuberculosis of the Udder, or Acute Inflammation of the Udder, or from any disease specified in Schedule 11 (viz. Acute Mastitis, Actinomycosis of the Udder, Anthrax, Foot and Mouth Disease, Suppuration of the Udder).

CLEANLINESS OF COWSHEDS, DAIRIES, ETC.

Cowsheds must have a sufficient number of windows for lighting purposes, and ventilating openings must be sufficient and kept in working order.

If milking is carried out at any time in the hours of darkness there must be sufficient artificial light provided.

The water supply must be suitable and sufficient.

Milk must not be kept in places where it may become contaminated or infected.

Milk vessels must be properly covered or otherwise protected from dust, dirt, flies, or other contamination.

PERSONAL CLEANLINESS.

Every person engaged in the milking of cows or the distribution or measuring of milk, or otherwise having access to the milk or churns, or other milk receptacles, shall keep his clothing and person in a cleanly condition.

Articles 18 and 19 provide for the various measures to be adopted in case of an outbreak of infectious disease due to the consumption of infected milk.

Article 20 prohibits the keeping of swine or poultry in a cowshed or room in which cows in milk are kept or milked, or in which milk or milk utensils are kept, or in any room or shed communicating directly with such places.

Article 21 lays down rules for the proper cleansing of all vessels and appliances used in connection with milk :—

(1) Thorough washing and cleansing.
(2) Scalding with boiling water or steam.
(3) Storage in a clean place and protection from dust and dirt.

Articles 27–29. The interior surfaces of milk vessels must be capable of being readily cleansed. Anyone who purchases milk for the purposes of trade or business and who empties and returns the churns and receptacles (other than bottles) must thoroughly clean and close these before they leave his control.

SPECIAL PROVISIONS APPLICABLE TO COWKEEPERS.

Articles 22 *and* 25 are of the utmost importance, and deal with the cleansing of cowsheds, the precautions to be taken when milking, and the subsequent cooling of the milk.

The systematic inspection of dairies and milk farms has been carried on for a long time, but the work has been handicapped by the lack of power to insist on necessary improvements. This is largely given by the 1926 Order, and it will behove those who are concerned in the milk trade to commence to " put their house in order," for the demand for clean milk is becoming more and more insistent, and much careful thought and organization will be necessary on the part of many if they are to remain in the trade.

It is possible, as has been shown before, to obtain a very clean milk without expensive apparatus and without any big outlay of money.

From personal experience it may be said that the results of inspection are very varied. One dairy farm may boast a spotless dairy with spotlessly clean utensils, but the shippons and the cows may prove to be so dirty that the condition of the cows would scarcely bear description in print.

Another large dairy farm may show some slight improvement in the condition of the cattle, but the dairy may be poor and unsatisfactory, and amount to little more than a slightly modified wash-house.

It is refreshing to the Inspector to happen on a dairy farm where the proprietor is really trying to produce clean milk and has the capital to equip his place with first class dairy farming apparatus, and the Inspector leaves such a place with an impression the reverse of that hopeless one which is engendered by the sight of dirty cattle and a plausible but ignorant cow-keeper who thinks that the methods of his great-grandfather were, and still are, good enough, and who wonders what all the fuss and bother is about.

The trade may be assured of the utmost support from this department in their efforts to effect improvements. The time is past when a man may properly embark on milk production simply by buying two or three cows and putting them in a shed.

What is wanted is *clean milk* from *healthy cows*. To supply this the animal must be *kept clean*, and, therefore, systematic grooming must be undertaken. The udder must be cleansed immediately before milking. If milking is carried out in the shippon, as is usually the case, this shippon must be kept free from dust and dirt, the walls and ceiling should be kept perfectly clean, and a definite process of cleansing should be carried out some time before milking, so that dust may settle before this process is begun.

The milker should prepare his hands as for a surgical operation, he should wear clean white overalls, and otherwise keep himself clean. The milk-pail should have been scalded and kept free from contamination, and be covered up immediately it is filled with milk and before transfer to the dairy for cooling.

The milking stools should be kept scrubbed clean. The shippon should be well ventilated and the atmosphere fresh. The milk should be transferred immediately to a clean well-ventilated dairy and cooled by an efficient cooler. The only proper way to distribute milk is in glass bottles and these should be sterilized by boiling water or steam before being filled from the cooler, and sealed.

The above would appear to me to be the minimum of the precautions to be observed in dealing with milk, and carried out intelligently and conscientiously, would produce results which would astonish many present day milk producers. The method of delivering milk in cans and ladelling it into jugs at the door of the consumer is unsatisfactory, and will rapidly become obsolete.

SLAUGHTER HOUSES.

The time is close at hand when the whole question of the Public Slaughter-houses will have to be considered with a view to modern accommodation being provided.

The Public Slaughter-houses are in Poplar Street, on a plot of freehold land comprising 5,258 square yards. The buildings were erected in 1880.

There are thirteen Slaughter-houses. Seven are let to butchers at a yearly rental; the other six are used in common by butchers who pay a "head rate." There are a like number of lairs directly opposite the Slaughter-houses. During 1927 there were 23,006 animals slaughtered. In the middle of the yard between the lairages are two gut-scraping establishments.

Animals slaughtered in the Borough for human consumption :—

	Poplar Street Slaughter-houses. Public.	Poplar Street Slaughter-houses. Rented.	In the Seven Private Slaughter-houses.	Totals.
Cattle	669	1,346	780	2,795
Calves	412	859	166	1,437
Sheep	3,636	15,264	9,069	27,969
Pigs	820	—	1,225	2,045
Total	5,537	17,469	11,240	34,246

1005 Pigs have been killed on private premises. It is quite time improved Pig-slaughtering accommodation should be provided at the Public Slaughter-houses, so as to enable the slaughtering to be done under proper supervision.

PRIVATE SLAUGHTER HOUSES.

There are seven Private Slaughter-houses in the District. Only three of the seven are in use. They are kept satisfactorily clean and free from nuisance, and the business in each case is properly conducted. About 33% of the animals slaughtered in the District are dealt with in the Private Slaughter-houses.

THE PUBLIC HEALTH (MEAT) REGULATIONS, 1924.

No difficulty has been experienced during the year, and none is anticipated. The trade generally is of a very high class, and the President and Members of the Butchers' Association may be relied on to maintain an exceptional standard all round.

BACTERIOLOGICAL EXAMINATION OF MILK.

	Samples from Producers in the Borough.	Samples from Producers outside the Borough.
Samples from Bulk	(a) 17	(a) 85
Of which found to be Tuberculous	(b) 0	(b) 0
Samples from individual cows (from the above 17 and 85 cases)	5	0
Of which found to be Tuberculous	0	0

(a) Guinea Pigs died before test completed—14. The table shows that none of the samples taken were found Tuberculous.

The standard of Cleanliness in Milk has received attention, but in no case was sufficient pollution found to justify a prosecution.

TUBERCULOSIS ORDER, 1925.

This Order of the Minister of Agriculture and Fisheries, dated the 13th day of July, 1925, came into operation on the 1st September, 1925. It gives to Local Authorities powers similar to those contained in the Tuberculosis Order, 1914, which was suspended in August, 1914.

Under the new Order every person having in his possession or under his charge (1) any Cow which is, or appears to be, suffering from Tuberculosis of the Udder, Indurated Udder or other Chronic Disease of the Udder; or (2) any Bovine animal which is, or appears to be, suffering from Tuberculous Emaciation; or (3) any Bovine animal which is suffering from Chronic Cough and showing definite Clinical signs of Tuberculosis, is required to give notice of the fact to the Local Authority.

Provision is made for compensation to be paid to the owner of every animal dealt with under the Order; during 1927 the Local Authority have dealt with six cows, which have all proved to be Tubercular on post-mortem examination. The owner, in five of the cases received the minimum amount of forty-five shillings as compensation. In the sixth case the sum received by the Local Authority on sale of the carcase, exceeded the amount paid for compensation which excess was also paid to the owner. In every case dealt with the cowshed was disinfected after the animal had been removed. We welcome the new Order, and consider the powers given to Local Authorities are of great benefit to the public in safeguarding the milk supply and preventing the harbouring and dissemination of Bovine Tuberculosis; in fact they have already been most satisfactorily applied.

Animals inspected by the Veterinary Inspector....	803
Bovine post-mortems conducted..................	6

REGISTERED COWKEEPERS AND PURVEYORS OF MILK.

Cowkeepers.	Cowkeepers and Purveyors.	Purveyors.
11	59	133

WORN-OUT OR DISEASED ANIMALS brought (some at the instance of the Veterinary or Dairy Inspectors) by cattle dealers or farmers in the Borough and adjoining Districts to be slaughtered for value of salvage, and those dead before arrival :—

From—	Town.	Country.
Tuberculosis	16	33
Calving	1	0
Accident	13	0
Dropsical	0	2
Emaciation	0	4
Pneumonia	3	1
	33	40

Factory and Workshop Acts.

The following Report is made out in accordance with the requirements of the Home Office, to whom a copy of this Report has to be sent.

FACTORIES, WORKSHOPS, WORKPLACES, AND HOMEWORK.

1.—INSPECTION.

Including Inspections made by Sanitary Inspectors.

Premises.	Number of Inspections.	Number of Written Notices.	Number of Prosecutions.
FACTORIES (Including Factory Laundries).	127	1	None.
WORKSHOPS (Including Workshop Laundries).	326	5	,,
WORKPLACES	65	0	,,
Totals	518	6	,,

2.—DEFECTS FOUND.

Particulars.	Number of Defects: Found.	Number of Defects: Remedied.	Number of Defects: Referred to H.M. Inspector.	Number of Prosecutions.
Nuisances under the Public Health Acts—*				
Want of Cleanliness	3	3	None.	None.
Want of Ventilation	—	—	,,	,,
Overcrowding	—	—	,,	,,
Want of Drainage of Floors	—	—	,,	,,
Other Nuisances	12	12	,,	,,
|| Sanitary Accommodations — insufficient	3	3	,,	,,
|| Sanitary Accommodations — unsuitable or defective	4	4	,,	,,
|| Sanitary Accommodations — not separate for sexes	1	1	,,	,,
Offences under the Factory and Workshop Act				
Illegal occupation of Underground Bakehouse (S. 101)	None.	None.	,,	,,
Breach of special Sanitary Requirements for Bakehouses (SS. 97 to 100)	4	4	,,	,,
Other Offences	None.	None.	,,	,,
Total	27	27	,,	,,

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* Including those specified in sections 2, 3, 7 and 8 of the Factory and Workshop Act as remediable under the Public Health Acts.

|| Section 22 of the Public Health Acts Amendment Act, 1890, has been adopted in Southport. The standard of sufficiency and suitability of sanitary accommodation for persons employed in factories and workshops is in accordance with the Sanitary Accommodation Order of 4th February, 1903.

4.—REGISTERED WORKSHOPS.

Total number of workshops on Register........342

5.—OTHER MATTERS.

Class.		Number.
Matters notified to H.M. Inspectors of Factories		—
Failure to affix Abstract of the Factory and Workshop Act (S. 133)............................		—
Action taken in matters referred by H.M. Inspectors as remediable under the Public Health Acts, but not under the Factory Act (S. 5)	Notified by H.M. Inspector	3
	Reports (of action taken) sent to H.M. Inspector	—
Other Matters—Forms received from H.M. Inspector *re* New Workshops		19
Underground Bakehouses (S. 101)—		
Certificates granted during the year		—
In use at the end of the year		8

GEO. C. BARNES,

Medical Officer of Health.

Note.—The Factory and Workshop Act, 1901 (s. 132), requires the Medical Officer of Health, in his Annual Report to the District Council to report specifically on the administration of the Act in workshops and workplaces, and to send a copy of his Annual Report, or so much of it as deals with this subject, to the Secretary of State (Home Office).

Water Supply.

"No Purer Water occurs in Nature."

The water supply is maintained by the Southport, Birkdale, and West Lancashire Water Board, which is a combination of the local Authorities of the County Borough of Southport, the Urban District of Formby, and the West Lancashire Rural District, and supplies water within the area of these three Authorities.

The Board was constituted under Act of Parliment of 1901 to take over the Waterworks Undertaking established by the Southport Waterworks Company in 1854.

The supply is constant and sufficient, and the quality good. With the exceptions referred to below, all property within the Borough is supplied direct from the Board's mains.

The Board owns four Pumping Stations, situated six to ten miles South-West of the Town in the Parishes of Aughton, Bickerstaffe and Lathom, and the whole of the water is obtained from Wells over 200 feet deep. Only three of these Stations, however, supply water to the Borough of Southport. Owing to the depth of the Wells and the nature of the strata, the possibilities of contamination are most remote. The waters have no plumbo-solvent action, and no reports of contamination have been received. Although somewhat hard, the water is exceptionally pure, both chemically and bacteriologically.

The last available figures, namely, those for the year ending 31st March, 1927, show that the Board then supplied, direct, an estimated Population, excluding Summer Visitors, of 103,738. The average domestic consumption, excluding Meter supplies and based on this population figure, was at the rate of about 23·84 gallons per head per day; and the total consumption 31·01.

HOUSES NOT SUPPLIED WITH TOWN WATER.

There are 17 houses in the Borough which derive their water from shallow wells on their own premises. The cost of furnishing a supply of Town's water to these would exceed the water rate authorised to be charged within the district. The supply from these wells up to the present time has been adequate, and we have no cause for apprehension as regards the quality of the water.

Two small holdings in Town Lane are also situated some considerable distance from the Board's mains. These people use the Board's water carrying it from premises which are supplied by meter.

ANALYSIS, SAMPLE, 24th DECEMBER, 1927.

CHEMICAL.

	Parts per 100,000.
Calcium Carbonate	20·29
Magnesium Carbonate	3·66
Calcium Sulphate	·78
Magnesium Sulphate	9·51
Magnesium Chloride	·33
Sodium Carbonate	1·48
Sodium Chloride	4·30
Potassium Carbonate	·94
Silica, etc.	·50
	41·79

Temporary hardness	24·6
Permanent hardness	8·8
Total hardness	33·4
Free Ammonia	·001
Organic Ammonia	·001
Oxygen absorbed in 3 hours	·020
Nitrates	Nil.
Nitrites	Nil.
Lead	Nil.
Colour seen in a 2-foot tube	Pale Blue Green.
Appearance	Bright and Sparkling.

HERBERT E. DAVIES.

BACTERIOLOGICAL.

No. of organisms per c.c. capable of growing upon nutrient gelatine at 22 deg. C. in three days	7 colonies per c.c.
No of organisms per c.c. capable of growing upon agar at 37 deg. C. in three days	4 colonies per c.c.
Smallest quantity of water giving acid and gas reaction in MacConkey's bile salt lactose broth	absent in 90 c.c.

Streptococci absent in 90 c.c. of water.

Bac. Enteritidis absent in 100 c.c. of water.

E. E. GLYNN.

RESULTS FOR CONSECUTIVE YEARS.

	Temporary.	Permanent.	Total.
1913—Nov. 28th	26·5	12·0	38·5
1913—Dec. 18th	22·6	16·4	39·0
1915—Mar. 18th	24·0	12·0	36·0
1915—Mar. 23rd	21·0	12·4	33·4
1916—Feb. 3rd	26·2	7·6	33.8
1917—Feb. 17th	18·7	9·6	28·3
1918—Jan. 29th	18·6	9·9	28·5
1919—Jan. 13th	24·9	17·0	41·9
1919—Dec. 30th	25·5	14·6	40·1
1920—Dec. 16th	23·0	12·8	35·8
1921—June 29th	25·5	13·8	39·3
1922—Nov. 23rd	23·2	12·7	35·9
1923—Oct. 9th	23·2	12·4	35·6
1924—Oct. 21st	23·7	13·4	37·1
1925—Sept. 30th	23·7	11·6	35·3
1926—Oct. 5th	20·5	9·1	29·6
1927—Dec. 24th	24·6	8·8	33·4

Meteorology.

LOCAL WEATHER.

The outstanding meteorological features of 1927 at Southport were unusual dullness generally, a remarkably depressing July, and a severe and unprecedentedly easterly December. Barometic pressure was low, and rainfall rather heavy ; but, for the most part, the year was mild. The most violent gale experienced for nearly 25 years occurred on October 28–29.

TEMPERATURE OF THE AIR.

	Mean Temperature	Deviation from Normal	Absolute Extremes	
1927	°	°	Highest °	Lowest °
January	41·4	+2·3	52	27
February	39·8	+0·1	55	23
March	45·3	+3·8	63	33
April	46·4	+0·8	61	33
May	51·9	+0·8	78	29
June	54·3	−2·3	75	39
July	60·9	+1·5	73	48
August	60·5	+1·4	78	46
September	55·1	−0·3	72	43
October	51·6	+2·4	64	36
November	43·7	+0·6	61	27
December	35·7	−4·3	51	20
Year	48·9	+0·6	78	20

It will be seen that nine months were warmer than usual, and that the mean temperature of the complete year was about half-a-degree above the average ; while all the extreme maximum temperatures were, nevertheless, acceptably moderate. No certainly warmer March has been experienced since the observatory was established, 56 years ago ; but, on the other hand, December was the coldest month of its name since that of 1892, and therefore for 35 years. During the twelve months, taken together, frost frequency was nearly normal.

SUNSHINE AND OZONE.

1927	Duration of Sunshine Hours	Deviation from Normal Hours	No. of Sunless days	Mean Daily Ozone 0 to 10
January	31·1	−12·2	11	5·0
February	66·4	−1·0	10	2·2
March	119·6	+0·7	3	4·0
April	156·1	−15·4	1	5·0
May	200·0	−8·7	2	3·4
June	204·2	−8·0	1	4·7
July	142·1	−61·3	3	3·4
August	154·7	−21·5	3	4·0
September	112·7	−26·6	6	3·8
October	107·4	+10·4	5	2·8
November	65·4	+9·1	9	3·0
December	22.7	−14·0	19	1·4
Year	1382·4	−148·5	73	3·6

Only three duller years have been reported since the first sunshine recorder was erected at Southport, over 36 years ago; and only two less sunny holiday—quarters (July to September). The cloudiness of January and December was trying. October and November alone yielded any appreciable surplus of sunshine. The year's aggregate deficiency of 149 hours is the largest, with the exception of that of 1920, since the pair of remarkably dull years that immediately preceded the War.

July was completely spoiled by an inexplicable misty sky-haze, producing (especially) strange morning and evening gloom, but without the colouring usually indicative of volcanic dust.

RAINFALL.

1927	Total Rainfall Inches	Deviation from Normal Inches	Number of days with rain	Duration of Definite Rainfall Hours
January	3·75	+1·07	24	69·9
February	1·91	−0·23	15	42·5
March	3·52	+1·29	19	56·0
April	1·07	−0·75	21	29·1
May	1·18	−1·03	11	25·6
June	3·09	+0·93	12	49·1
July	2·88	−0·14	19	42·8
August	5·21	+1·54	19	74·2
September	5·09	+1·96	21	85·6
October	3·05	−0·66	17	46·8
November	4·28	+1·21	19	69·9
December	1·22	−2·05	9	38·3
Year	36·25	+3·14	206	629·8

August and September, unhappily, were the wettest months ; but neither their excesses of rainfall, nor that of the year as a whole, were especially large ; the district escaping many rains that fell elsewhere, as well as the very widespread and serious snowstorms of December. Days with rain were 16 more than the normal number. Snowfalls were restricted to January and December, and were extremely slight.

HUMIDITY AND SUBSOIL WATER LEVEL.

1927.	Humidity of the air at 9 a.m. % of Saturation	Deviation from Normal % of Saturation	Mean Level of subsoil Water * Inches	Deviation from Normal Inches
January	89	+1	35·7	+1·8
February	91	+3	34·2	+1·7
March	85	+1	32·3	—0·5
April	77	—2	34·6	—0·1
May	70	—6	40·2	+2·6
June	73	—2	44·7	+3·1
July	83	+5	46·2	+0·6
August	83	+3	47·6	+0·1
September	84	+2	44·6	—3·2
October	89	+3	40·8	—5·3
November	87	—1	36·0	—5·9
December	87	—2	39·6	+1·4
Year	83	0	39·7	—0·3

* Distance below Well-mouth.

The most interesting feature in the humidity results is the surprising increase of 10 per cent. in the mean value of that element which took place from June to July, and after which there was no recovery whatever.

The ground-water level was a little low in the early Summer, but high during the Autumn, in consequence of the rain of August and September.

WIND DIRECTION (GROUPED)

	Duration Percentages.				Deviations from Normals.			
	N.E. & E.	S.E. & S.	S.W. & W.	N.W. & N.	N.E. & E.	S.E. & S.	S.W. & W.	N.W. & N.
1927.	%	%	%	%	%	%	%	%
January	3	24	59	14	— 9	—10	+20	— 1
February	11	51	23	15	— 6	+15	— 9	0
March	10	38	44	8	—11	+13	+10	—12
April	7	7	54	32	—16	—13	+20	+ 9
May	31	18	20	31	+ 5	— 3	—10	+ 8
June	11	16	42	31	—12	— 1	+10	+ 3
July	20	37	25	18	+ 5	+18	—14	— 9
August	17	31	39	13	+ 3	+ 9	— 2	—10
September	16	15	44	25	— 5	—13	+14	+ 4
October	16	32	31	21	— 6	— 4	+ 6	+ 4
November	26	25	24	25	+ 8	— 8	— 6	+ 6
December	53	44	0	3	+38	+ 6	—32	—12
Year	18	28	34	20	— 1	+ 1	+ 1	— 1

Except in May, northerly to easterly winds were singularly infrequent throughout the earlier half of the year; but their unprecedented prevalence during part of November and the whole of December compensated for most of the January to June deficiency! The year was a rather calm one; although, exceptionally, around the midnight of October 28th to 29th, a great storm occurred, in which an hour's run of 70 miles of wind, and three gusts at rates of from 95 to 97 miles per hour, were recorded.

(Signed) JOSEPH BAXENDELL,
Borough Meteorologist.

THE FERNLEY OBSERVATORY,
SOUTHPORT.

ATMOSPHERIC POLLUTION—COMPARATIVE STATISTICS.

Monthly Means, at various Places, for the Year April, 1926, to March, 1927.
In Metric Tons per Square Kilometre.

STATIONS	Rainfall (Per Pollution Gauge.) In Millimetres.	Insoluble Matter.			Total Insoluble Matter.	Total Soluble Matter.	TOTAL SOLIDS.	Included in Soluble Matter.		
		Tar.	Carbonaceous, other than Tar.	Grit, (as Ash).				Sulphates (SO_3).	Chlorine (Cl).	Ammonia (NH_3).
Southport :—										
Hesketh Park.........	78	0·03	0·77	0·79	1·59	2·27	3·86	0·59	0·66	Trace
Woodvale Moss	70	*	*	*	1·31	2·11	3·42	*	*	*
Glasgow :—										
Alexandra Park......	66	0·04	1·41	2·80	4·25	3·35	7·60	1·11	0·58	0·17
Bellahouston Park...	76	0·06	0·98	2·24	3·28	4·50	7·78	1·36	0·51	0·11
Blythswood Square	84	0·11	2·02	4·71	6·84	4·89	11·73	1·60	0·69	0·28
Botanic Gardens ...	77	0·18	1·42	3·12	4·72	4·79	9·51	1·50	0·51	0·15
Queen's Park.........	74	0·04	1·14	2·39	3·57	4·39	7·96	1·14	0·49	0·17
Richmond Park......	72	0·07	1·63	3·36	5·06	4·19	9·25	1·32	0·52	0·14
Ruchill Park	81	0·08	1·40	2·53	4·01	3·62	7·63	1·27	0·46	0·14
Tollcross Park	72	0·17	1·94	4·15	6·26	4·64	10·90	1·58	0·57	0·14
Victoria Park.........	75	0·09	2·24	3·36	5·69	5·92	11·61	1·73	0·53	0·21
Newcastle-on-Tyne :—										
City Road	54	0·33	8·11	14·53	22·97	6·40	29·37	2·35	0·46	0·15
Town Moor...........	75	0·21	1·30	1·69	3·20	4·89	8·09	1·48	0·41	0·08
Westgate Road	74	0·29	2·49	4·33	7·11	6·50	13·61	2·27	0·39	0·10
Hull.........................	46	0·11	2·86	4·18	7·15	5·89	14·24	2·06	0·65	0·11
Burnley	106	0·78	4·84	9·28	14·90	13·30	28·20	4·28	1·18	0·24
Wakefield	54	0·16	2·23	4·04	6·43	10·95	17·38	3·68	1·04	0·12
Rochdale..................	*	*	*	*	14·46	3·32	17·78	*	*	*
Huddersfield (Deighton) ...	76	0·17	2·37	4·16	6·70	7·19	13·89	*	*	*
Salford (Ladywell San.)...	61	0·35	3·03	4·54	7·92	2·75	10·67	1·86	1·01	0·11
St. Helens	79	0·23	4·28	7·88	12·88	5·74	18·62	2·33	0·87	0·20
Liverpool	75	0·17	3·02	6·89	10·08	8·15	18·23	2·39	0·97	0·28
Marple.....................	83	0·21	1·24	0·90	2·35	2·12	4·46	1·09	0·71	0·05
Stoke-on-Trent	59	0·33	1·02	3·03	4·38	2·33	6·72	0·73	0·45	0·07
Birmingham :—										
Central	56	0·12	2·38	6·05	8·55	4·64	13·19	1·43	0·43	0·14
Bournville Works ...	69	0·06	1·04	2·13	3·23	3·37	6·60	0·91	0·35	0·02
,, Village...	68	0·04	0·64	1·06	1·74	2·32	4·06	0·70	0·28	0·01
Rothamsted	66	*	0·52	0·88	1·40	2·18	3·58	*	*	*
Kingston-on-Thames	32	0·11	0·86	0·55	1·52	2·55	4·07	0·80	0·30	0·02
London :—										
Meteorological Office	46	0·15	2·17	3·68	6·00	3·88	9·88	1·22	0·55	0·08
Archbishop's Park...	58	0·15	3·07	4·77	7·99	4·49	12·48	1·57	0·49	0·38
Finsbury Park	52	0·14	1·27	3·51	4·92	3·50	8·40	1·01	0·45	0·08
Golden Lane	58	0·03	3·52	5·01	8·56	6·92	15·49	2·30	0·73	0·41
Ravenscourt Park †	56	0·27	1·49	4·40	5·96	3·76	9·72	1·17	0·48	0·13
Southwark Park ...†	56	0·09	1·97	2·94	5·00	3·42	8·42	1·24	0·49	0·12
Victoria Park.........	59	0·08	1·34	2·47	3·89	2·98	6·87	1·01	0·37	0·12
Wandsw'rth C'mm'n	55	0·06	1·55	2·20	3·81	2·37	6·18	0·80	0·43	0·09

* Not determined.

† Means of 11 months only.

TABLE I. VITAL STATISTICS OF WHOLE DISTRICT DURING 1927 AND PREVIOUS YEARS.

COUNTY BOROUGH OF SOUTHPORT.

Year.	Population estimated to Middle of each year.	Births.			Total Deaths Registered in the District. z		Transferable Deaths. *a*		Nett Deaths belonging to the District.			
			Nett.						Under 1 Year of Age.		At all Ages.	
		Un-corrected Number.	Number.	Rate.	Number *	Rate	of Non-residents registered in the District.	of Residents not registered in the District.	Number. *	Rate per 1,000 Nett Births.	Number. *	Rate.
1	2	3	4	5	6	7	8	9	10	11	12	13
1917	66.000	785	800	11·16	895	13·56	65	106	65	81	928	*b*14·06
1918	69.000	776	788	10·99	1042	15·79	93	119	47	60	1059	16·05
1919	70.000	877	887	12·14	1038	14·83	98	132	80	90	1078	15·40
1920	70.000	1259	1261	17·26	915	13·07	81	121	68	54	945	13·50
1921	71.900	1120	1106	15·38	894	12·43	71	97	77	70	920	12·80
1922	72.020	1023	1028	14·27	940	13·05	79	114	58	56	975	13·54
1923	72,410	1012	996	13·76	940	12·98	69	106	65	65	977	13·49
1924	73,650	952	934	12·90	977	13·24	78	109	59	63	1006	13·66
1925	74,260	988	973	13·10	880	11·85	56	118	59	61	987	12·62
1926	77,970	942	928	11·90	878	11·26	72	124	58	62	930	11·93
1927	**78,670**	**973**	**958**	**12·18**	**1002**	**12·74**	**64**	**130**	**46**	**48**	**1067**	**13·56**

z Including deaths in the Borough Isolation Hospital in the West Lancashire Rural District.

* In Column 6 are included the whole of the deaths registered during the year as having actually occurred within the district, military deaths excepted.

In Column 12 is entered the number in Column 6, corrected by subtraction of the number in Column 8 and by the addition of the number in Column 9. Deaths in Column 10 are similarly corrected by subtraction of the deaths under 1, included in the number given in Column 8, and by addition of the deaths under 1 included in the number given in Column 9.

a **" Transferable Deaths " are deaths of persons who, having a fixed or usual residence in England or Wales, die in a district other than that in which they resided.**

b See remarks, Table III.

The following Special Cases arise as to Transferable Deaths :—

(1) Persons dying in Institutions for the sick or infirm, such as hospitals, lunatic asylums, workhouses, and nursing homes (but not almshouses) have been regarded as residents of the district in which they had a fixed or usual residence at the time of admission. If the person dying in an Institution had no fixed residence at the time of admission the death is not transferable.

(2) The deaths of infants born and dying within a year of birth in an Institution to which the mother was admitted for her confinement have been referred to the district of fixed or usual residence of the parent.

(3) Deaths from Violence have been referred (*a*) to the district of residence, under the general rule ; (*b*) if this district is unknown, or the deceased had no fixed abode, to the district where the accident occurred, if known ; (*c*) failing this, to the district where death occurred, if known ; and (*d*) failing this, to the district where the body was found.

	Census 1911		1921
Total population at all ages	69,643	...	71,900
Number of inhabited houses	15,676	...	16,314
Average number of persons per house	4·44	...	4·41
Area of District in acres (land and inland water) ...	9,426	...	9,426

TABLE II. CASES OF INFECTIOUS DISEASE NOTIFIED DURING THE YEAR 1927.

COUNTY BOROUGH OF SOUTHPORT.

Notifiable Disease.	Number of Cases Notified.								Total Cases Notified in each Locality.					Total Cases Removed to Hospital.
	At all Ages.	At Ages—Years.							1	2	3	4	5	
		Under 1.	1 to 5.	5 to 15.	15 to 25.	25 to 45.	45 to 65.	65 and upwards.	Six Central Wards. Est. pop. 31,948	Scarisbrick and Sussex Wards. Est. pop., 15,030	Park and Birkdale West Wards. Est. pop., 9,783	Hesketh Ward. Est. pop., 5,420	Birkdale N'rth, East South and Ainsdale. Wards. Est. pop., 16,489	
Small-pox	65	—	2	45	6	3	6	3	6	34	4	12	9	65
Cholera (C) Plague (P)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Diphtheria (including Membranous Croup)	49	—	5	22	11	8	1	2	19	12	1	3	14	46
Erysipelas	21	—	—	—	2	7	8	4	10	2	2	2	5	5
Scarlet Fever	144	—	26	98	13	5	2	—	24	60	13	17	30	114
Typhus Fever	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Enteric Fever	7	—	—	3	2	2	—	—	2	3	2	—	—	5
Para-Typhoid Fever	1	—	—	1	—	—	—	—	—	—	—	—	1	1
Relapsing Fever (R) Continued Fever (C)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Puerperal Fever	1	—	—	—	1	—	—	—	—	—	—	—	1	—
Puerperal Pyrexia	1	—	—	—	—	1	—	—	—	—	—	—	1	—
Tuberculous Meningitis	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Poliomyelitis	1	—	1	—	—	—	—	—	—	—	—	1	—	—
Pulmonary Tuberculosis	73	—	—	3	12	38	16	4	34	7	4	7	21	54
Other forms of Tuberculosis	24	—	5	10	3	5	1	—	8	7	3	2	4	—
Chicken Pox	348	6	64	258	13	5	1	1	113	122	32	16	65	1
Measles	401	13	114	250	17	5	2	—	129	31	62	107	72	16
German Measles	26	1	5	13	5	1	1	—	10	4	2	1	9	—
Whooping Cough	118	10	57	46	2	3	—	—	22	42	8	8	38	—
Ophthalmia Neonatorum	5	5	—	—	—	—	—	—	1	2	—	2	—	—
Pneumonia	81	3	8	16	6	14	24	10	22	11	14	9	25	—
Influenzal Pneumonia	25	1	4	2	3	4	5	6	17	1	6	—	1	—
Dysentery Amoebic	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Malaria	1	—	—	—	—	1	—	—	—	1	—	—	—	—
Encephalitis Lethargica	2	—	—	—	—	—	1	1	1	1	—	—	—	—
Totals	1394	89	291	767	96	102	68	31	418	340	153	187	296	307

TABLE III. CAUSES OF, AND AGES AT, DEATH DURING THE YEAR 1927.

COUNTY BOROUGH OF SOUTHPORT.

Causes of Death	Nett Deaths at the subjoined ages of "Residents" whether occurring within or without the District (a).									Total Deaths whether of "Residents" or "Non-Residents" in Institutions in the District (b).
	All ages.	Under 1 year.	1 and under 2 years.	2 and under 5 years	5 and under 15 years	15 and under 25 years	25 and under 45 years	45 and under 65 years	65 and upwards	
1	2	3	4	5	6	7	8	9	10	11
All Causes { Certified (c)	1032	43	3	12	12	22	85	293	562	—
All Causes { Uncertified	35	3	—	—	—	1	4	9	18	—
1—Enteric Fever	1	—	—	—	—	1	—	—	—	—
2—Small-pox	—	—	—	—	—	—	—	—	—	—
3—Measles	2	1	1	—	—	—	—	—	—	—
4—Scarlet Fever	—	—	—	—	—	—	—	—	—	—
5—Whooping Cough	3	1	—	1	1	—	—	—	—	—
6—Diphtheria and Croup	—	—	—	—	—	—	—	—	—	—
7—Influenza	56	—	—	1	—	—	9	12	34	1
8—Erysipelas	—	—	—	—	—	—	—	—	—	—
9—Phthisis (Pulmonary Tuberculosis)	41	—	—	—	1	5	18	14	3	10
10—Tuberculous Meningitis	3	2	—	1	—	—	—	—	—	1
11—Other Tuberculous Diseases	4	—	—	—	2	1	1	—	—	2
12—Cancer, malignant disease	143	—	—	1	—	—	4	67	71	18
13—Rheumatic Fever	4	—	—	—	1	—	—	2	1	2
14—Meningitis (See Note (d))	3	1	—	—	1	—	—	1	—	2
15—Organic Heart Disease	159	—	—	—	—	1	8	37	113	8
16—Bronchitis	95	3	—	1	—	—	3	17	71	5
17—Pneumonia (all Forms)	59	6	2	2	—	3	9	14	23	9
18—Other diseases of respiratory organs	18	—	—	—	—	—	1	7	10	5
19—Diarrhœa & Enteritis (See Note (e))	3	3	—	—	—	—	—	—	—	1
20—Appendicitis and Typhlitis	5	—	—	—	1	1	1	2	—	2
21—Cirrhosis of Liver	5	—	—	—	—	—	—	3	2	—
21a—Alcoholism	1	—	—	—	—	—	—	1	—	—
22—Nephritis and Bright's Disease	37	—	—	—	—	2	2	15	18	8
23—Puerperal Fever	—	—	—	—	—	—	—	—	—	—
24—Other Accidents and Diseases of Pregnancy and Parturition	4	—	—	—	—	—	4	—	—	2
25—Congenital Debility and Malformation, including Premature Birth	21	21	—	—	—	—	—	—	—	7
26—Violent Deaths, excluding Suicide	29	—	—	1	2	4	5	11	6	10
27—Suicide	13	—	—	—	—	—	3	8	2	1
28—Other Defined Diseases	347	8	—	4	3	4	18	85	225	44
29—Diseases ill-defined or unknown	11	—	—	—	—	1	3	6	1	1
	1067	46	3	12	12	23	89	302	580	184

NOTES TO TABLE III.

(a) All "Transferable Deaths" of residents, i.e. of persons resident in the District who have died outside it, are *included* with the other deaths in columns 2—10. Transferable deaths of non-residents, i.e. of persons resident elsewhere in England and Wales who have died in the District, are in like manner *excluded* from these columns. For the precise meaning of the term "transferable deaths" *see* footnote to Table I. The total deaths in column 2 of Table III equal the figures for the year in column 12 of Table I.

(b) All deaths occurring in institutions for the sick and infirm situated within the District, whether of residents or of non-residents, are entered in the last column of Table III.

(c) All deaths certified by registered Medical Practitioners and all Inquest cases are classed as "Certified"; all other deaths are regarded as "Uncertified."

(d) Exclusive of "Tuberculous Meningitis" but inclusive of Cerebro-Spinal Meningitis.

(e) Title 19 has been used for deaths from Diarrhœa and Enteritis at all ages. (In the "Short List," deaths from Diarrhœa and Enteritis under 2 years are included under Title 19; those at 2 years and over being placed under Title 28).

TABLE IV. INFANTILE MORTALITY DURING THE YEAR 1927.

Nett Deaths from stated Causes at Various Ages under One Year of Age.

COUNTY BOROUGH OF SOUTHPORT.

(See Note (*a*) at Back.)

Causes of Death.		Under 1 week.	1–2 weeks.	2–3 weeks.	3–4 weeks.	Total under 4 weeks.	1–3 months.	3–6 months.	6–9 months.	9–12 months.	Total Deaths under 1 year.
All causes	Certified	9	2	4	3	18	12	6	3	4	43
	Uncertified	1	—	—	—	1	1	1	—	—	3
Small-pox		—	—	—	—	—	—	—	—	—	—
Chicken-pox		—	—	—	—	—	—	—	—	—	—
Measles		—	—	—	—	—	—	—	—	1	1
Scarlet Fever		—	—	—	—	—	—	—	—	—	—
Whooping Cough		—	—	—	—	—	—	1	—	—	1
Diphtheria & Croup		—	—	—	—	—	—	—	—	—	—
Erysipelas		—	—	—	—	—	—	—	—	—	—
Tuberculous Meningitis		—	—	—	—	—	—	—	1	1	2
Abdominal Tuberculosis (*b*)		—	—	—	—	—	—	—	—	—	—
Other Tuberculous Diseases		—	—	—	—	—	—	—	—	—	—
Meningitis (*not Tuberculous*)		—	—	—	—	—	—	1	—	—	1
Convulsions		2	—	1	1	4	1	—	—	—	5
Laryngitis		—	—	—	—	—	—	—	—	—	—
Bronchitis		—	1	—	—	1	—	—	1	1	3
Pneumonia (all forms)		—	—	—	—	—	3	1	1	1	6
Diarrhœa		—	—	—	—	—	—	2	—	—	2
Enteritis		—	—	—	—	—	1	—	—	—	1
Gastritis		—	—	—	—	—	1	—	—	—	1
Syphilis		—	—	—	—	—	—	—	—	—	—
Rickets		—	—	—	—	—	—	—	—	—	—
Suffocation, overlying		—	—	—	—	—	—	—	—	—	—
Injury at birth		—	—	—	—	—	—	—	—	—	—
Atelectasis		—	—	—	—	—	—	—	—	—	—
Congenital Malformations (*c*)		2	—	1	—	3	2	—	—	—	5
Premature birth		5	1	1	—	7	2	—	—	—	9
Atrophy, Debility & Marasmus		1	—	—	2	3	2	2	—	—	7
Other Causes		—	—	1	—	1	1	—	—	—	2
Totals		10	2	4	3	19	13	7	3	4	46

Nett Births registered during the calendar year	legitimate	891	Nett Deaths registered during the calendar year	legitimate	41
	illegitimate	67		illegitimate	5
	Total	958		Total	46

Death Rate 48. Legitimate Death Rate 46, Illegitimate Death Rate 75.

NOTES TO TABLE IV.

(a) The total in the last column of Table IV equals the total in column 10 of Table I, and in column 3 of Table III.

(b) Under Abdominal Tuberculosis are included deaths from Tuberculous Peritonitis and Enteritis and from Tabes Mesenterica.

(c) The total deaths from Congenital Malformations, Premature Birth, Atrophy, Debility and Marasmus, equal the total in Table III under the heading Congenital Debility and Malformation including Premature Birth.

(d) For references to the meanings of any other headings, *see* notes attached to Table III.

In recording the facts under the various headings of Tables I, II, III and IV, attention has been given to the notes on the Tables.

GEO. C. BARNES,
Medical Officer of Health.

March, 1927.

TABLE V.

Showing the total number of Cases of Infectious Disease notified in the Borough, and the Deaths resulting therefrom, during the last 10 years (1918–1927).
It includes the Deaths which occurred both in the Borough, and in the Borough Infectious Diseases Hospital (outside the Borough).

	Number of Cases of Infectious Disease notified.											Deaths from Infectious Disease.											
	1918.	1919	1920.	1921.	1922.	1923.	1924.	1925.	1926.	1927.	Total Cases for 10 years 1918 to 1927.	1918.	1919.	1920.	1921.	1922.	1923.	1924.	1925.	1926.	1927.	Total Deaths during 10 years 1918 to 1927.	Case Mortality (of all cases) in Borough and Borough Hospital for 10 years, 1918 to 1927.
Scarlet Fever	68	119	199	129	168	101	107	132	122	144	1289	2	1	—	—	2	—	—	—	1	—	6	0·47%
Small-pox	—	—	—	—	—	—	—	—	—	65	65	—	—	—	—	—	—	—	—	—	—	—	—
Diphtheria	49	69	41	109	42	37	35	44	35	49	510	3	6	2	5	1	1	—	2	1	—	21	4·12%
Typhus	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Typhoid Fever	9	7	8	13	2	7	16	4	5	7	78	2	1	1	3	—	—	1	—	1	1	10	12·82%
Para-Typhoid Fever	3	—	—	1	—	2	1	—	—	1	8	—	—	—	—	—	1	—	—	—	—	1	12·5%
Continued Fever	1	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—
Erysipelas	30	41	52	23	30	22	36	36	34	21	325	2	—	1	1	—	3	—	1	1	—	9	2·77%
Puerperal Fever	4	3	6	5	1	1	3	1	2	1	27	—	—	2	1	—	—	1	1	—	—	5	18·52%
Puerperal Pyrexia	—	—	—	—	—	—	—	—	—	1	1	—	—	—	—	—	—	—	—	—	—	—	—
Cerebro-Spinal Meningitis	—	—	—	—	2	1	—	—	—	—	3	—	—	—	—	—	—	—	—	—	—	—	—
Poliomyelitis	—	—	3	1	1	1	—	—	2	1	9	—	—	—	—	—	—	—	—	—	—	—	—
Pulmonary Tuberculosis	148	98	91	80	104	87	101	74	83	73	939	51	61	44	42	43	52	65	44	36	41	479	51·01%
Other forms of Tuberculosis	44	21	29	34	23	32	34	36	28	24	305	12	14	8	10	8	16	13	10	8	7	106	34·75%
Ophthalmia Neonatorum	12	23	20	12	7	6	11	2	3	5	101	—	—	—	—	—	—	—	—	—	—	—	—
*Chicken Pox	327	269	426	412	119	307	249	372	391	348	3220	—	—	—	—	—	—	—	—	—	—	—	—
*Measles	862	125	499	890	170	1064	288	672	887	401	5858	4	1	2	2	1	9	2	3	5	2	31	0·53%
German Measles	55	43	44	53	26	16	23	187	45	26	518	—	—	—	—	—	—	—	—	—	—	—	—
*Whooping Cough	238	79	262	293	208	121	292	240	418	118	2269	3	2	3	5	9	—	4	2	5	3	36	1·59%

The following additional notifications were received :—Pneumonia (all forms) 106 ; Encephalitis Lethargica, 2 ; Malaria, 1.

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*Chicken Pox, Measles and Whooping Cough were made compulsorily notifiable in Southport in May, 1902, and Cerebro-Spinal Meningitis, Poliomyelitis and Ophthalmia Neonatorum in February, 1912.
Measles, German Measles, and Whooping Cough :—Only the first case in a house in two months is notifiable.

TABLE VI.

Cases of certain Infectious Disease treated in the Borough Infectious Diseases Hospitals during the last 10 years, 1918 to 1927.

	1918 ‡	1919 ‡	1920 ‡	1921	1922	1923	1924	1925	1926	1927	Totals for the Ten years, 1918 to 1927.
Scarlet Fever............	54	90	140	94	125	84	87	102	91	114	981
Small-pox	—	—	—	—	—	—	—	—	—	°45	45
Diphtheria	34	53	31	84†	34	29	29	39	31	46	410
Typhoid Fever	6	1	4	8	—	1	12	—	3	5	40
Para Typhoid Fever...	—	—	—	—	—	—	—	—	—	1	1
Erysipelas	2	4	4	5	4	3	5	4	3	5	39
Puerperal Fever.........	2	1	3	4	—	—	—	—	1	—	11
Measles	4	1	2	17	2	5	3	20	6	16	76
German Measles.........	—	2	—	1	—	—	—	7	—	—	10
Chicken Pox	—	1	1	—	—	—	1	9	5	1	18
Cerebro-Spinal Meningitis	1	—	1	—	—	—	—	—	—	—	2
Ophthalmia Neonatorum	4	10	5	—	3	—	—	—	—	—	22
Totals	107	163	191	213	168	122	137	181	140	233	1655
Miscellaneous Cases ...	8	15	22	20	10	9	22	14	7	8	135
Pneumonia...............	—	1	1	—	1	1	—	2	3	—	9
Poliomyelitis	—	—	—	—	—	—	—	—	1	—	1
Influenzal Pneumonia	12	—	—	—	—	—	—	—	—	—	12
T.B. Meningitis	—	—	—	—	—	—	—	—	1	—	1
Tuberculosis	46	53	45	50*	48*	52*	50*	61*	46*	54*	505
	173	232	259	283	227	184	209	258	198	295	2318

* Including cases from outside the District :—

1921	1922	1923	1924	1925	1926	1927
17	10	5	10	19	5	1

† Including two imported cases.

‡ Including Military cases.

SMALL-POX.—In addition to the above, there were 24 cases admitted to Sparrow Hall, making a Total of 69 cases.

° Including 4 cases from outside the Borough.

DEATHS AMONG THE ABOVE.

	1918	1919	1920	1921	1922	1923	1924	1925	1926	1927	Totals for the Ten years 1918 to 1927.
Scarlet Fever............	2	1	—	—	1	1	—	1	1	—	7
Small-pox	—	—	—	—	—	—	—	—	—	—	—
Diphtheria	1	4	1	5*	—	2*	—	2	2*	—	17
Typhoid Fever	—	—	1	1	—	—	1	—	1	—	4
Puerperal Fever.........	—	—	—	1	—	—	—	—	—	—	1
Measles	—	—	—	—	—	1	—	—	—	—	1
Whooping Cough	—	—	—	—	—	—	—	—	1	—	1
Ophthalmia Neonatorum	1	—	—	—	—	—	—	—	—	—	1
Tuberculosis	17†	7†	14†	5	6†	15	8†	9	10	9	100
Pneumonia...............	5	—	—	—	—	—	—	1	1	—	7
Erysipelas	—	1	—	1	—	—	—	—	—	—	2
Infantile Diarrhœa ...	—	—	1	—	—	—	—	—	—	—	1
Cerebral Hæmorrhage	—	—	—	—	—	—	—	—	1	—	1
Tuberculous Meningitis	—	—	—	—	—	1	—	—	—	—	1
Capillary Bronchitis ...	—	—	—	—	—	—	—	—	1	—	1
Encephalitis Lethargica	—	—	—	—	1	—	1	—	—	—	2
Totals	26	13	17	13	8	20	10	13	18	9	147

* Including one non-resident of Southport.

† Including 3 non-residents of Southport in 1918 ; 2 in 1919 ; 3 in 1920 ; 1 in 1922 ; and 1 in 1924.

TABLE VIII. VITAL STATISTICS—ENLARGED BOROUGH OF SOUTHPORT (INCLUDING SOUTHPORT, BIRKDALE, AND AINSDALE).

NOTE—The figures given in this Table, except in columns distinguished as "native" or "local," are gross figures, without correction, and on that account may in some cases be found to differ from the figures given in Tables I to IV, which are corrected in accordance with the requirements of the Ministry of Health, as stated in the notes appended to them

YEAR.	BIRTHS.		DEATHS.					DEATHS FROM													
	Male.	Female.	Male.	Female.	Resident more than One Year.	Resident less than One Year.	Bad Lives Imported	Seven Zymotic Diseases.	Small-pox.	Measles.	Scarlet Fever.	Diphtheria.	Whooping Cough.	Fever.	Diarrhœa	Cholera and Choleraic Diarrhœa	Diseases of the Respiratory Organs.	Phthisis.	Violence.	Imported Phthisis.	Imported Diseases of Respiratory Organs.
1912	526	502	430	459	787	102	88	22	—	6	1	10	3	2	—	—	129	55	25	12	11
1913	524	539	406	480	791	95	87	38	—	3	1	2	5	1	26	—	137	52	26	9	14
1914	505	511	449	525	886	88	64	33	—	10	1	5	8	1	8	—	178	50	23	7	9
1915	486	491	456	574	932	98	77	26	—	5	6	8	5	—	2	—	164	49	31	7	5
1916	513	495	441	505	851	95	72	41	—	21	1	15	—	—	4	—	142	47	24	8	11
1917	390	395	378	517	806	89	72	13	—	—	3	3	4	1	2	—	130	51	25	6	13
1918	404	372	465	579	927	117	83	22	—	4	2	3	3	2	8	—	148	51	16	13	14
1919	446	431	476	562	961	77	60	24	—	2	1	6	2	1	12	—	160	51	30	1	10
1920	662	597	438	477	889	26	17	14	—	2	—	1	3	1	7	—	125	46	28	7	15
1921	554	566	411	483	874	20	16	25	—	2	—	6	5	2	10	—	129	38	26	7	2
1922	538	468	441	501	927	15	15	18	—	1	2	1	9	—	5	—	163	42	32	3	1
1923	514	498	438	502	929	11	10	20	—	9	—	2	—	—	9	—	159	55	26	7	8
1924	505	447	431	546	959	18	16	11	—	2	—	—	5	1	3	—	155	65	32	9	11
1925	500	488	401	479	845	35	41	9	—	2	—	3	2	—	2	—	146	37	26	2	10
1926	471	472	412	475	825	62	17	15	—	6	1	2	5	1	—	—	119	35	36	4	12
1927	492	481	462	540	935	62	5	5	—	1	—	—	3	1	3	—	170	38	38	4	9

YEAR.	Deaths in Public Institutions.	Deaths under One Year of Age to 1000 Births.	DEATHS OF PERSONS AGED.						ANNUAL RATES PER THOUSAND LIVING.							Population. (Estimated to Middle of Year).
			0—1.	1—.	5—15.	15—25.	25—60	60 and upwards	Births.	Deaths, Gross.	Deaths, Local.	Deaths, Zymotic.	Deaths, Native Phthisis.	Deaths, Diseases of Respiratory Organs, Gross.	Deaths, Diseases of Respiratory Organs, Local.	
1912	87	77	79	38	33	23	259	457	14·55	12·58	11·34	·31	·61	1·83	1·67	70,640
1913	73	92	98	30	14	31	249	464	14·95	12·46	11·24	·53	·60	1·93	1·73	71,092
1914	100	104	106	49	23	23	264	509	14.16	13·58	12·68	·46	·60	2·48	2·36	71,747
1915	85	90	88	46	35	35	293	533	13·63	15·20	14·06	·38	·62	2·42	2·35	67,700
1916	79	83	84	52	32	25	245	508	14·06	14·12	13·04	·61	·58	2·19	1·96	67,000
1917	83	80	63	44	28	30	234	496	10·95	13·56	12·47	·20	·68	2·00	1·77	66,000
1918	88	61	47	55	45	64	335	498	10·82	15·79	14·56	·33	·58	2·24	2·03	66,000
1919	103	93	82	36	26	53	332	509	12·23	14·83	14·01	·33	·71	2·29	2·14	70,000
1920	87	54	68	22	24	33	282	486	17·23	13·07	12·11	·20	·56	1·79	1·57	70,000
1921	96	66	74	29	15	34	244	496	15·58	12·43	12·21	·35	·43	1·79	1·77	71,900
1922	92	59	59	32	19	43	243	546	13·97	13·78	12·87	·25	·54	2·26	2·25	72,020
1923	98	63	64	40	14	26	250	546	13·98	12·98	12·84	·28	·66	2·20	2·09	72,410
1924	95	63	56	35	12	31	253	590	12·93	13·26	13·02	·15	.76	2·10	1·95	73,650
1925	85	58	58	26	12	25	221	538	13·30	11·85	11·30	·12	·47	1·97	1·83	74,260
1926	93	63	60	21	13	26	235	532	12·09	11·37	10·58	·19	·40	1·52	1·37	77,970
1927	134	48	47	15	12	24	262	642	12·37	12·74	11·95	·06	·43	2·16	2·05	78,670

(For the years 1871–1911 see Report for year 1915).

TABLE IX.—VENEREAL DISEASES.

RETURN relating to all persons who were treated at the Treatment Centre at Southport during the year ended the 31st December, 1927.

	Syphilis.		Soft Chancre.		Gonorrhœa.		Conditions other than Venereal.		TOTAL.	
	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females
1. Number of cases which— (*a*) at the beginning of the year under report were under treatment or observation for	98	74	2	—	158	78	46	30	304	182
(*b*) had been marked off *in a previous year* as having ceased to attend or as transferred to other Centres, and which returned to the Treatment Centre during the year under report *suffering from the same infection*	—	2	—	—	7	3	1	—	8	5
TOTAL—Items 1 (*a*) and 1 (*b*)	98	76	2	—	165	81	47	30	312	187
2 (*a*). Number of cases dealt with at the Treatment Centre during the year *for the first time*	32	15	1	—	113	33	47	39	193	87
TOTAL—Items 1 (*a*), 1 (*b*) and 2 (*a*)	130	91	3	—	278	114	94	69	505	274
2 (*b*). Number of cases *included* in Item 2 (*a*) known to have received *previous treatment at other Centres* for the same infection	3	—	—	—	5	—	—	—	8	—
3. Number of cases which ceased to attend— (*a*) before completing the first course of treatment for	1	1	—	—	11	5	—	—	12	6
(*b*) after one or more courses but before completion of treatment for	1	—	—	—	—	—	—	—	1	—
(*c*) after completion of treatment, but before final tests as to cure of	5	9	—	—	11	10	—	—	16	19
4. Number of cases transferred to other Treatment Centres after treatment for	12	3	—	—	19	6	—	—	31	9
5. Number of cases discharged after completion of treatment and observation for	5	3	2	—	55	7	58	25	120	35
6. Number of cases which, at the end of the year under report, were under treatment or observation for	106	75	1	—	182	86	36	44	325	205
TOTAL—Items 3, 4, 5 and 6	130	91	3	—	278	114	94	69	505	274
7. Out-patient attendances— (*a*) For individual attention by the Medical Officer	833	830	22	—	2288	749	206	200	3349	1779
(*b*) For intermediate treatment, *e.g.*, irrigation, dressings, etc.	73	1228	—	—	3290	3073	119	388	3482	4689
TOTAL ATTENDANCES	906	2058	22	—	5578	3822	325	588	6831	6468
8. Aggregate number of " In-patient days " of treatment given to persons who were suffering from	178	450	—	—	419	666	427	316	1024	1432

	For detection of			For Wassermann Reaction.
9. Examinations of Pathological material :—	Spirochetes.	Gonococci.	Other Organisms.	
(*a*) Specimens which were examined at, and by the Medical Officer of, the Treatment Centre		No record kept.		
(*b*) Specimens from persons attending at the Treatment Centre which were sent for examination to an approved laboratory	3	873 Smears 38 Urines 3 Cultures	1 Urine for pus.	4 C.S.F.'s 338 Wassermann

TABLE IX (Continued).—VENEREAL DISEASES.

Statement showing the services rendered at the Treatment Centre during the year, classified according to the area in which the patients resided.

Name of County or County Borough (or Country in the case of persons residing elsewhere than in England and Wales) to be inserted in these headings.	Wigan.	Manchester.	Sunderland.	Bolton.	Rochdale.	Warrington.	Cheshire.	Gloucester.	Liverpool.	Darlington.	Lancashire.	Southport.	TOTAL.
A. Number of cases from each area dealt with during the year *for the first time* and found to be suffering from :—													
Syphilis					1	1				1	3	41	47
Soft Chancre												1	1
Gonorrhœa	1	1	1	2			1	1	4	1	11	123	146
Conditions other than venereal									2	—	6	78	86
TOTAL	1	1	1	2	1	1	1	1	6	2	20	243	280
B. Total number of attendances of all patients residing in each area	2	5	1	11	7	8	4	1	103	5	498	12654	13299
C. Aggregate number of "In-patient days" of all patients residing in each area											124	2332	2456
D. Number of doses of arsenobenzol compounds given in the :— 1. Out-patient Clinic					3	5				2	38	955	1003
2. In-patient Dept. to patients residing in each area.	—	—	—	—	—	—	—	—	—	—	7	282	289

E. Names of arsenobenzol compounds used in the treatment of syphilis and the usual initial doses.	N.A.B. 45—75; Sulfarsenol, Silber Salvarsan 1 gr.—3 grm. Neo Trepol, Spirellen Stabilarsan, Bismuth Salts, and Bismostol, Khar Sulphan—Neo Khars.
F. Amount and kind of treatment usually administered to a case of syphilis of each of the types usually dealt with at the Treatment Centre.	PRIMARY. One course of Arsenical Compounds to a total of 4 grams, nine injections of Hg or Bismostol (each injection=1 grm.). One month on Mist. KI; two months on Hg in the form of pills. Then a second course of arsenical compounds total of 4 grms. This is followed by KI and Hg for three months. Periodic exams. and Wassermann tests, and continuance of Hg extending over 2 years. SECONDARY and LATE PRIMARY. Same course as above except 3 courses are given over a period of 16 months independently of what Wassermann reaction shows—a total of 12 grms. of arsenobenzol compounds. Alternating with Hg by the mouth, or by injection. Patients are then kept under observation (when possible) for two years. TERTIARY AND PARA-SYPHILITIC. Patients are treated with Silber Salvarsan in small doses extending over a long period, weekly injections for 3 or 4 months then KI for some months, then the Silber Salvarsan course repeated.
G. Nature of tests applied in deciding as to discharge of patients referred to in Item 5 on previous page.	SYPHILIS. After treatment and being under observation for at least 2 years, more frequently 3 years, absence of all clinical manifestations, and negative tests for at least 12 months, after provocative tests. SOFT CHANCRE. All sores healed. Under observation, examinations, and periodic 12 months tests to avoid possibility of Syphilis. GONORRHŒA.—1. FEMALES. Examinations, Cultures, and smears taken and provocative tests given every two months after completion of treatment for 12 months and longer if possible. 2. MALES. Discharges ceased, smears from follicles, prostate, vesicles, and urine deposits before and after provocative tests show absence of G'ci. and pus, re-examination 2 months after completion of curative treatment. Urethroscope examination must show no thickening of muscous membrane of Urethra or tendency to abscess. In very chronic or Rheumatic cases Complement Fixation tests are used as control of treatment.

(Signed) HENRY BARDSLEY, M.R.C.S., L.R.C.P.,
Medical Officer of the Treatment Centre.